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INFORMATION OPERATIONS IN PURSUIT OF TERRORISTS

by

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INFORMATION OPERATIONS IN PURSUIT OF TERRORISTS

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ABSTRACT

The Global War on Terror is in its sixth year now, and the battle with the Islamist terrorists is being fought both in the physical as well as the informational domain. This research examines the relationship between terrorism and information operations, keeping in view Martin Libicki's notion of information warfare as a *Mosaic of Forms*. This research begins with the basics of terrorism and information operations, and proceeds to highlight the use of information operations by terrorist organizations and, in particular, its use by Al Qaeda. In order to compare the complete spectrum of information operations being conducted by United States-led forces in this Global War on Terror, this research includes two detailed studies on the prosecution of information operations from the perspective of both the United States-led coalitions and the anti-coalition elements in Afghanistan and Iraq. The study concludes by highlighting the relevance of Libicki's constructs in the context of the Global War on Terror and proposes a macro strategy to pursue the Islamist terrorists in the information domain.

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ॐ भूर्भुवः स्वः ।
तत् सवितुर्वरेण्यं ।
भर्गो देवस्य धीमहि ।
धियो यो नः प्रचोदयात् ॥
[Om bhūr bhuvaḥ svaḥ
tāt savitūr vāreṇīyaṃ
bhārgo devāsya dhīmahi
dhīyo yó naḥ prachodáyāt]

We meditate the adorable effulgence of the divine Sun, may that
unfold our Intellects.

I would like to thank the Indian Army for providing me with this opportunity to attend graduate studies programs at the Naval Postgraduate School – undoubtedly one of the finest military academic institutions. Personally, the learning experience during this course has been simply amazing, and I thank all the faculty members with whom I interacted during my education here. I take this opportunity to convey my sincere gratitude to Dr. John Arquilla for his mentorship and guidance in putting together this thesis. Dr. Arquilla has been truly inspirational and a *Guru* par excellence, and I will surely cherish this experience. I would also like to thank Dr. Hy Rothstein and Steve Iatrou for their help during the writing of this work, and Louise Fleetwood for being such a wonderful editor.

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I dedicate this thesis to the Armed Forces of India – to all the soldiers, sailors and airmen.

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I. INTRODUCTION

Never believe any war will be smooth and easy, or that anyone who embarks on the strange voyage can measure the tides and hurricanes he will encounter.

Winston Churchill

A. BACKGROUND

September 11, 2001, may be regarded as a 'watershed date' for the world community toward its efforts in fighting the menace of terrorism worldwide. This is the date that led the United States and many of the countries of the world to launch coordinated and calculated attacks aiming at dismantling the terrorist infrastructure and its support elements in all their forms. The worldwide support for this Global War on Terrorism (GWOT), led by the United States, was overwhelming, initially. Since terrorism is generally seen as an aberration in societal conduct and is perceived as against the established ethos of humanity, a global alliance for such an endeavor was easy to structure and promulgate. Nancy Gibbs, in her article in *Time* magazine describes the feeling of togetherness in the world community immediately after 9/11 as, "*Shoulder to shoulder, until justice is done.*"¹

The most visible responses to the September 11, 2001, attacks are the military operations in Afghanistan and Iraq by the United States and its allies. The world community in general has been transfixed by these military campaigns which are a *state-centric*² approach toward fighting global terrorism. Apart from the military aspect of the Global War on Terrorism, there is a continuous battle, in the information domain, between the terrorist organizations and the United States-led forces to prevail in the information spectrum. These battles, though

¹ Nancy Gibbs, "What We've Learned," *Time*, Sep 11, 2006, 34.

² Jeremy Pressman, "Leaderless Resistance: The Next Threat?" *Current History*, Dec 2003, 422.

not so visible, do have a profound impact on the way military operations are prosecuted on the ground. The battle for the information spectrum is now ingrained into the various strategic-level doctrines defining the approach to defeat terrorism as an ideology, a philosophy and a *way of life*. It has also percolated down to the tactical domain wherein military commanders are understanding its importance and trying to utilize it, along with military operations, to achieve better results. The hypothesis elucidated in the article *Information-Age Terrorism*³ aptly describes the importance of information and its ability to transform conflict between unbalanced adversaries in the present Information Age. The strengthening of network organizations and its impact on non-state actors, as well as the accessibility of global communication and information infrastructure, has truly re-defined the nature of today's conflict from a mere kinetic application of force to a knowledge-intensive show of nearly *unmanageable* permutations.

Terrorist organizations are perhaps more adaptive and constantly absorbing the Information Age paradigms for using the information environment to their advantage. This is amply clear with their usage of modern communication means, including the Internet and the omnipresent *news-hungry* media. The adaptive nature of Al Qaeda is clearly visible from its dispersed organizational structure and the manifestation of its ideology in various parts of the world. Al Qaeda has emerged as a decentralized and unstructured ideological movement for global Jihad⁴ capable of carrying out strikes all over the globe with due deliberation and a lot of patience. The use of the Information Age paradigms by Al Qaeda and other regional terrorist organizations could provide important lessons toward fighting their ideology and cutting off their command and control infrastructure. The 'Al Qaeda Syndrome' that is now visible in various regional Islamic terrorist organizations exhibits the subtle linkages between them and hence, dealing with such organizations will definitely require a common and

³ John Arquilla, David Ronfeldt and Michele Zanini, "Information-Age Terrorism." *Current History*, Apr 2000.

⁴ David Ronfeldt, "Al Qaeda and Its Affiliates: A Global Tribe Waging Segmental Warfare?" *First Monday*, Vol. 10, No. 3, Mar 7, 2005 [on-line], available from http://www.firstmonday.org/issues/issue10_3/ronfeldt/index.html; accessed Sep 24, 2006.

shared strategy, especially in the information spectrum. The key point is to understand the adaptive nature of terrorist organizations to exploit the information environment.

The prosecution of the GWOT over a period of five years has broken the bonds of togetherness between the world communities that it so cherished just five years back. *“The war on terrorism goes on, but with little discernible success.”*⁵ This view of the GWOT is further amplified by the diminishing rating of the president of the United States and a growingly divisive coalition of nations supporting the GWOT. The phrase *“full-spectrum dominance”* falls apart with respect to the information domain since the macro realities do not correspond to any *discernible success*. Although the recently released document *“9/11 Five Years Later: Successes and Challenges”*⁶ lucidly brings out the achievements of the United States policy in countering global terrorism, it also points subtly toward activities in the information domain that have had, and shall continue to have, a profound impact on the GWOT. Even though the document points us toward the *“successes,”* that notion fails totally when we see the statistics of terrorist-related incidents that show an increase in incidents worldwide from 11,153 in 2005 to 14,338 in 2006; an increase from 3,468 to 6,630 incidents in Iraq, and an increase from 491 to 749 incidents in Afghanistan during the same period.⁷ Dr. Bruce Hoffman, an eminent scholar and an expert in the field of terrorism, during his testimony before the Committee on Armed Services, Subcommittee on Terrorism, Unconventional Threats and Capabilities, United States House of Representatives, has remarked,

Four and a half years into the war on terrorism, the United States stands at a crossroads. The sustained successes of the war’s early phases appear to have been stymied by the protracted insurgency

⁵ “Global Progress Report 2006” *Current History*, Dec 2005 [journal on-line], available from at <http://www.currenthistory.com/GlobalProgressReport,2006.pdf>, accessed Sep 2006.

⁶ United States of America, “9/11 Five Years Later: Successes and Challenges,” Washington, DC, Sep 2006 [on-line], available from <http://www.whitehouse.gov/nsc/waronterror/2006/waronterror0906.pdf>, accessed Sep 24, 2006.

⁷ United States of America, *Country Reports on Terrorism – 2006*, [on-line], available at <http://www.state.gov/s/ct/rls/crt/2006/>; Internet; accessed 23 May 2007. The statistics of the terrorist related incidents are given at the Annex of Statistical Information in the document.

*in Iraq More consequential, but less apparent perhaps, has been our failure to effectively counter our enemies' effective use of propaganda and related information operations.*⁸

B. THESIS OVERVIEW – PURPOSE AND SCOPE OF THIS STUDY

The area of research covered in this thesis deals primarily with Information Operations in the context of the GWOT. The GWOT has compelled all the nations of the world, and in particular the United States and its allies, to achieve a common perspective with regard to the information spectrum in order to combat the terrorist networks worldwide. The thesis will focus on the strategy adopted by the United States and its allies in the information domain to deal with terrorism, and in particular, Al Qaeda, with examples from Operation Enduring Freedom (OEF) and Operation Iraqi Freedom (OIF) as dominant case studies. The thesis will also dwell on the changes affected in Al Qaeda's organization and structures due to the GWOT, and focus on the adaptability and utilization of the paradigms of information operations in order to achieve their aims. Finally, the thesis will try to propose a strategy to be adopted in the information domain for prosecution of the GWOT.

1. Purpose

The GWOT has put the world community into a totally different operating environment; the paradigm from a war against conventional, well-defined armies to well diffused and hidden terrorist networks and organizations requires innovative adaptations to conventional strategy, doctrine, tactics, and the overall *philosophy* of warfare. The war against covert, illegal, non-state actors requires a different approach to warfare, especially when information emerges as a resource that plays an increasingly important role.

The physical dominance and destruction of terrorist organizations and their networks is the major part of the effort on the GWOT, but equally important

⁸ Bruce Hoffman, RAND Corporation, Testimony before the Committee on Armed Services, Subcommittee on Terrorism, Unconventional Threats and Capabilities, United States House of Representatives, Feb 16, 2006.

are the operations prosecuted in and through the information domain that provide strategic and operational guidance in prosecuting operations on the ground. The dominance of information in various forms, as an effective weapon for prosecuting actions against terrorists and their organizations, beginning at the strategic level and flowing down to the tactical level, requires information to be successfully acquired, followed by assimilation, transformation, dissemination and exchange. Information as a resource has become prominent in this Information Age and the terrorist organizations are exploiting it and adapting it to their organization and infrastructure.

The purpose of the research is to analyze the battles in the information environment between Al Qaeda, as the dominant terrorist organization, and the United States and its allies post September 11, 2001, with a focus on Afghanistan and Iraq.

This leads us to analyze and compare the efforts of the international community in their fight against terrorism vis-à-vis the ability of the terrorist organizations to exploit the Information Age paradigms to their advantage. The success and the failure of the GWOT is measurable by actions and reactions in the information domain, and thus research to assess the information spectrum in the GWOT is bound to provide important learning and a way ahead toward achieving proportional results in the information domain.

2. Scope

The purpose of the research is to highlight the various battles in the information domain between Al Qaeda, as the vanguard of the global Islamic terrorism movement, and the United States and its allies, with a focus on OEF and OIF. In order to establish and explore the various battles in the information domain, the research will include the following - Firstly, the research covers some fundamental issues pertaining to information operations, terrorism, and tries to draw out the linkages. Secondly, the research analyzes the approach undertaken by Al Qaeda to exploit the information spectrum, by bringing out various examples. Thirdly, the research, while trying to analyze OEF and OIF, maintains

its focus toward analyzing the various sub-domains of Information Operations as defined by Martin Libicki in his seminal paper on Information Warfare,⁹ and thus analyze the sub-domains like the Command and Control Warfare (C2W), Intelligence based Warfare (IBW), Psychological Warfare (PSYW), Economic Information Warfare (EIW), Cyber Warfare (CyW), and Electronic Warfare (EW) with a perspective towards GWOT. These aspects are highlighted from the strategic and tactical perspectives both for Al Qaeda as a global terrorism vanguard, and the United States and its allies participating in the GWOT in Afghanistan and Iraq. This has led to a better understanding of the value of each of these sub-domains in a non-conventional strategic and tactical environment, followed by an approach to enhance their effectiveness, with a bottom line that operations in the information domain are essential for successful prosecution of the GWOT. Finally, the thesis concludes with a strategy that needs to be pursued in order to negate the use of information operations by terrorist organizations, and provide a platform for countries around the world to prosecute a successful campaign against Islamic fundamentalist terrorism by utilizing information operations as a principal tool.

C. STRUCTURE OF THE THESIS: A CHAPTER OUTLINE

This chapter provides a background for undertaking research that identifies September 11, 2001, as the tipping point for the world community to focus on terrorism as a problem phenomenon and one that justifies the effort put in by the world community to find a solution. In the following chapters this data will provide a comparative point for judging the information environment both prior to and thereafter, and a perspective on how information operations have become more entwined into the nature of this conflict. This chapter also defines the parameters for this research in terms of its purpose and scope.

Chapter II focuses on the fundamental issues pertaining to terrorism and Information Operations. This chapter explores the different perspectives of terrorism, as understood by the world community, that signify the various

⁹ Martin Libicki, "What is Information Warfare," *National Defense University*, 1995.

approaches that are required to fight this menace. The chapter also discusses the theoretical aspects of both terrorism and Information Operations that provide a base for undertaking further research in the following chapters. The chapter concludes with the hypothesis that terrorist organizations need to conduct IO for their growth as well as survival in today's information age.

Chapter III examines the growth of Al Qaeda, its exploitation of Information Age paradigms to propagate its ideology, and its present structure and tactics with relation to Afghanistan and Iraq. The chapter will also analyze the changing structure of Al Qaeda post 9/11 as well as its capability to conduct the various types of information operations.

Chapter IV entails a detailed case study on how the United States and its allies developed the information spectrum in support of OEF, and the manner in which they used information as a weapon in war. The various battles in the information domain between the United States and its allies and the Taliban/Al Qaeda will be identified and analyzed. This will also lead us to identify actions that influence the information environment in Afghanistan.

Chapter V focuses on the battles in the information domain in Iraq. The information campaign is analyzed from the perspective of both the United States-led coalition forces as well as from the perspective of anti-coalition forces operating in Iraq. The uniqueness of the operations in Iraq allows a comparative assessment of information campaign during the initial phase of operations between the United States-led coalition and the Iraqi military, and in the later time frame between United States-led forces and the Iraqi insurgents. The chapter also dwells on the issue of public opinion with respect to the operations in Iraq and its relationship with the information environment.

Chapter VI compares the campaigns in Afghanistan and Iraq from the prism of Libicki's *Mosaic of Forms*. The forms of warfare as elucidated by Libicki as well as his *capabilities / vulnerabilities* with regard the elements of information warfare are analyzed from the perspective of the GWOT. The chapter also highlights the vulnerabilities of Islamist terrorist organizations and the elements of

information operations that may be applied to exploit the vulnerabilities. The chapter concludes with the strategic level guidance for information operations in pursuit of terrorists.

II. TERRORISM AND INFORMATION OPERATIONS: THEORETICAL PERSPECTIVE AND LINKAGES

A. UNDERSTANDING TERRORISM

All terrorist violence, Islamic or otherwise, is unjustifiable, unforgivable, cowardly and contemptible. But just because we condemn does not mean we should not strive to comprehend.

— Last few lines by Jason Burke in his book: *Al Qaeda: Casting the Shadow of Terror*.

Terrorism is not a modern phenomenon and it has been in existence in its different forms of manifestations since the dawn of recorded history.¹⁰ The debate in the period that such forms manifest themselves, and their analysis decades and centuries later, bring out contrasting characteristics, but the common thread that binds these together is the notion of the 'weak against the strong' and the notion of 'causing harm to unarmed civilians,' the value system to benchmark, 'who is/was right and who is/was wrong' changes with time. The perspective on terror as an integral part of state-craft, in a somewhat different form, was defined by *Kautilya* way back in the times of the Mauryan Empire (4th century B.C.) in the Indian sub-continent, through his book titled *Arthashastra*. The emphasis of *Kautilya*, in a number of instances, was to define the ability of the weak to cause harm to the strong and that causing harm to civilians to gain psychological advantage, the aspects identified in the use of spies and terror tactics and strategy in times of war, in terms of today's discussion of terrorism, will identify it as falling into that category.¹¹ A similar manifestation of terrorism is

¹⁰ Gus Martin, *Understanding Terrorism – Challenges, Perspectives and Issues* (New York: Sage, 2003). This initial discussion has been motivated by Martin's discussion on the history of terrorism.

¹¹ *Kautilya, Arthashastra*, trans. Project South Asia, Missouri Southern State University [online], available from <http://www.mssu.edu/projectsouthasia/history/primarydocs/Arthashastra/index.htm>, accessed Sep 27, 2006. The different books (chapters) as part of *Arthashastra* — Book IV, "The Removal of Thorns;" Book IX, "The Work of an Invader;" Book X, "Relating to War;" Book XII, "Concerning a Powerful Enemy;" Book XIII, "Strategic Means to Capture a Fortress;" and Book XIV, "Secret Means" — are sprinkled with examples that in the world view on terrorism in the present times, may relate to tactics adopted by terrorists in today's age against their powerful adversaries.

found in the Roman Era (during the declining years of the 1st century B.C.) that includes the brutal suppression of the adversaries and civilians through unconventional means and the assassination of political heads. This ancient tactic and strategy was used effectively by Genghis Khan¹² (12th and 13th century A.D.) during his campaigns in Central Asia and Eastern Europe. The tactics simply advertised brutality towards unarmed civilians to obtain disproportionate results. The example of the French Revolution and the *régime de la terreur* (reign of terror) that saw the use of violent and oppressive means by the state, and as described by the Anglo-Irish statesman Edmund Burke, gave us the word *terrorism*, as we know it today.¹³

Terror tactics have not only been the prerogative of states, they have been adopted by non-state players from the time when states began to propagate terror's utility. The terrorist tactic of violence and brutality has various examples of achieving tactical and strategic victories, but in the perspective of Caleb Carr, the "*strategy of using terror has always failed and will fail again.*"¹⁴ The emergence of non-state players as a major force in propagating this philosophy can be viewed as modern day terrorism. The idea of fighting against the state or the established principles of governance through the use of terror tactics, by individuals or groups, is what we see as the present dominant structure of terrorism. According to Brian Michael Jenkins, an established expert on terrorism at the RAND Corporation, the term "terrorism"¹⁵ came into being in France when Napoleon's chief of police ordered the roundup of terrorists responsible for an attempt on the emperor's life. The word thereafter has been identified with

¹² James Chambers, *The Devil's Horsemen: The Mongol Invasion of Europe* (New York: Atheneum, 1985). The book describes in detail the use of tactics propagated by the Mongols that can easily be identified as terrorism as we see it in today's world.

¹³ Edmund Burke, "Reflections on the Revolution in France," 1790 [on-line], available from http://www.constitution.org/eb/rev_fran.htm, also available from <http://www.bartleby.com/24/3/1001.html>.

¹⁴ Caleb Carr, *The Lessons of Terror: A History of Warfare Against Civilians; Why It Has Always Failed and Why It Will Fail Again* (New York: Random House, 2002). The point that Carr makes is debated by a number of experts. Alex Dershowitz in his book *Why Terrorism Works*, is of the opinion that terrorism does work and it is a phenomenon largely of our own making.

¹⁵ Brian Michael Jenkins, *Unconquerable Nation: Knowing Our Enemy, Strengthening Ourselves* (Santa Monica: RAND, 2006) [on-line], available from <http://www.rand.org/pubs/monographs/MG454/>, accessed Oct 24, 2006.

individuals or groups that use the tactics of terror with intent to bring down governments, and the tactics used are assassinations, bombings, kidnappings, and hijackings. The covert linkages, or illicit support provided by established institutions and states, is what projects such non-state actors—individuals and groups—into a different spectrum and category of this syndrome.

1. The Definition Quagmire

Because I do it with one small ship, I am called a terrorist. You do it with a whole fleet and are called an emperor.

— A pirate, from St. Augustine's "City of God"

I was called a terrorist yesterday, but when I came out of jail, many people embraced me, including my enemies, and that is what I normally tell other people who say those who are struggling for liberation in their country are terrorists. I tell them that I was also a terrorist yesterday, but, today, I am admired by the very people who said I was one.

— Nelson Mandela, *Larry King Live*, May 16, 2000

..

The above two quotes reflect the quandary of the contemporary world when it comes to defining terrorism. The complex relationships that exist between individuals, groups, nations, and societies create a confused state of environment and do not allow us to define or identify terrorism in a coherent manner. Alex Schmid and Albert Jongman, in their book titled *Political Terrorism*, have discussed 109 definitions of terrorism wherein twenty-two word categories are identified,¹⁶ This confusion, or the lack of acceptance in viewing terrorism by the world community in general, has led to a non-cohesive approach and varying perspectives in the actions required to mitigate this problem. The world community, under the aegis of the United Nations, has been trying in vain since the time of the establishment of its predecessor, the League of Nations, to come to a common definition on terrorism. On September 8, 2006, the 60th session of

¹⁶ Alex P Schmid and Albert J. Jongman, *Political Terrorism* (New Brunswick: Transaction, 2005).

the General Assembly of the United Nations adopted the *Global Counter-Terrorism Strategy*¹⁷ that states its mission as, "*Reaffirming that acts, methods and practices of terrorism in all its forms and manifestations are activities aimed at the destruction of human rights, fundamental freedoms and democracy, threatening territorial integrity, security of States and destabilizing legitimately constituted Governments, and that the international community should take the necessary steps to enhance cooperation to prevent and combat terrorism.*" Even with such a proclamation by most of members of the world community, the common definition of *terrorism* remains illusive. And as Cooper rightly has given an apt title to his paper, "*Terrorism: the Problem of the Problem Definition*" back in 1978 and states in this paper, "we can agree that terrorism is a problem, but we cannot agree on what terrorism is."¹⁸

Why is a common definition of terrorism important? The answer to this question is based on the facts that, firstly, modern terrorism has blown up into a global, systematic threat to international security and is justifiably comparable with armed conflicts, and that an absence of a common definition seriously undermines the efforts of the international community to tackle this grave threat to humanity. Secondly, the concept of "*one person's terrorist is another person's freedom fighter,*" is an extremely dangerous view of looking at the menace of terrorism from a global perspective — it creates illusion and provides an easy way out for states and institutions to provide overt and covert support to the entire phenomenon of terrorism. Such statements have become a cliché and an obstacle to efforts to successfully deal with terrorism.¹⁹ If nothing else, these statements lead to the questionable assumption that the ends justify the means. Thirdly, terrorism has networked into a worldwide phenomenon with intricate and

¹⁷ United Nations General Assembly, 60th Session, "Global Counter-Terrorism Strategy," Sep 8, 2006 [on-line], available from <http://www.un.org/terrorism/strategy-counter-terrorism.html>, accessed Oct 27, 2006.

¹⁸ H. H. A. Cooper, "Terrorism: The Problem of the Problem Definition," *Chitty's Law Journal*, 26, 1978, 106.

¹⁹ Mira Banchik, "The International Criminal Court & Terrorism," Jun 2003 [on-line], available from <http://www.peacestudiesjournal.org.uk/docs/ICC%20and%20Terrorism.PDF>, accessed Oct 27, 2006.

invisible linkages that span geopolitical boundaries and societies. There is therefore, a need to define a legal connotation to the term so that it is seen through a common framework and has a common perspective.

Terrorism is being debated politically and many nations have created special legislative provisions to criminalize terrorist acts in order to provide the law enforcement authority with additional powers to deter such acts.²⁰ The United States has enacted several acts that are direct fallout from the events of 9/11—the Patriot Act, the Financial Anti-Terrorism Act—issued several Executive Orders, and added/amended several regulations to accommodate actions against terrorists. Similarly, the United Kingdom has the *Terrorism Act 2000* and the *Anti-terrorism, Crime and Security Act 2001*. India, too, has recently enacted the *Prevention of Terrorism Act 2002* with the intention of strengthening the legal infrastructure deterring and dealing with terrorist activities.²¹ In order to achieve a universally accepted definition, we have to rely on objective and authoritative principles.

These examples demonstrate how terrorism is now pervasive as a legal concept in many domestic legal systems. The same provisions are needed at an international level that should also include a common definition on terrorism. There is a need for moral equivalence toward terrorist acts that involve killing of innocent people, their efforts directed against the established laws of governance, and their intent to undertake such actions. We need to get away from the “double-standards” as perceived by the world community. The definition must be founded on a system of principles and laws of war, legislated and ratified in many countries. A well established *global* definition of terrorism is necessary to formulate a common platform and framework in undertaking cooperative, cohesive, and focused operations in the information domain against the terrorist networks and organizations at the worldwide level. The flux in the information

²⁰ Ben Golder and George Williams, “What is Terrorism? Problem of Legal Definition,” *UNSW Law Journal*, Vol. 27/2, 2204, 270.

²¹ Ministry of Home Affairs, India, “Prevention of Terrorism Act 2002” [on-line], available from <http://mha.nic.in/poto-02.htm>, accessed Oct 27, 2006.

environment, due to a non-existent, universally acceptable definition, is being exploited by terrorist networks all over the world.

“When I use a word,” Humpty Dumpty said in rather a scornful tone, “it means just what I choose it to mean — neither more nor less.”

“The question is,” said Alice, “whether you can make words mean so many different things.”

“The question is,” said Humpty Dumpty, “which is to be master — that’s all.”

— Lewis Carroll - *Through the Looking Glass*, c.vi

2. Root Causes of Terrorism

...No one except a dumb thief plays with the security of others and then makes himself believe he will be secure whereas thinking people when disaster strikes make it their priority to look for its causes in order to prevent it happening again. But I am amazed at you even though we are in the 4th year after the events of September 11th. Bush is still engaged in distortion, deception and hiding from you the real causes. And thus the reasons are still there for a repeat of what occurred.²²

— Osama Bin Laden

The focus on understanding the root causes of terrorism is important from the point of view of this research, since they are the very *raison d'être* and motives that drive the various terrorist groups and organizations to shape the information environment toward their cause. Many academic scholars and terrorism experts have remarked that terrorism cannot be defeated by military or law and order means only, and that it requires a multi-pronged and multi-faceted approach, which includes strategies to eliminate the roots and causes of terrorism.²³ A discussion on causes of terrorism is bound to be controversial in

²² Osama bin Laden, from the transcript of a video-taped message released and aired in the Al Jazeera television network, as reported in the *Washington Post* on Nov 1, 2004 [on-line], available from <http://www.washingtonpost.com/wp-dyn/articles/A16990-2004Nov1.html>, accessed Oct 25, 2006.

²³ Muhammad Haniff Bin Hassan, “Key Considerations in Counter-Ideological Work Against Terrorist Ideology,” *Studies in Conflict and Terrorism*, Vol. 29, 2006, 531-558.

many ways, but it is sure to provide the necessary background and understanding, with regards to the driving forces behind terrorism, and to formulate a balanced and effective long-term campaign in the information domain.²⁴ The same view point is also expressed by the *Club de Madrid*²⁵ during the deliberations that took place as part of the International Summit on Democracy, Terrorism and Security held in Madrid from 8 to 11 March 2005 and documented in a series of working papers on the subject of the causes of terrorism.²⁶ A similar approach is also seen in the *National Security Strategy of the United States of America* wherein the emphasis on defining a long-term strategy for fighting terrorism is derived by analyzing the root causes.²⁷ As Kydd and Walter mention in concluding remarks in their paper, *Strategies of Terrorism*, information is one of the variables that is central in counterterrorism warfare and an accurate assessment of the information environment is essential for a correct and commensurate force application: “*The struggle against terrorism can more usefully be thought of as a struggle to collect and disseminate reliable information in environments fraught with uncertainty.*”²⁸ The root causes of terrorism, are therefore, thought of as a good starting point to understand the information environment that surrounds the phenomenon of terrorism, and to utilize the tenets of this information within the ambit of a counterterrorism

²⁴ Brynjar Lia and Katja H- W Skjolberg, “Why Terrorism Occurs: A Survey of Theories and Hypotheses on the Causes of Terrorism”, FFI Research Report No. 02769. Kjeller, Norway: FFI, 2000 and “Causes of Terrorism: An Expanded and Updated Review of the Literature,” FFI Research Report No. 04307. Kjeller, Norway: FFI, 2004. The discussion on the causes of terrorism has been well researched and documented with excellent findings. I have dwelled upon their findings quite liberally in this portion of the research.

²⁵ The *Club de Madrid* is an independent organization whose purpose and priority is to contribute to strengthening democracy in the world. It stimulates, promotes and conducts initiatives and activities and participates in projects seeking this objective. The Club of Madrid acts as a consultative body for governments, democratic leaders, and institutions involved in processes of democratic transition. The Club has a very impressive list of members that includes former heads of states and leading academic scholars in their respective fields. See <http://www.clubmadrid.org> for more details.

²⁶ Louise Richardson, ed, *The Roots of Terrorism* (New York: Routledge, 2006).

²⁷ United States of America, “The National Security Strategy of the United States of America,” Mar 2006.

²⁸ Andrew H. Kydd, and Barbara F. Walter, “The Strategies of Terrorism,” *International Security*, Vol. 31, No. 1, Summer 2006, 49-80

strategy. The discussion here will limit itself to the study of the causes of terrorism in general, and focus specifically on Al Qaeda and its version of *Jihadi terrorism*, in the following chapter.

a. *Relative Deprivation and Inequality*

Ted Gurr in his classic book, *Why Men Rebel*, examines the psychological frustration-aggression theory which argues that the primary source of the human capacity for violence is the ‘frustration-aggression mechanism.’ Gurr explains this hypothesis with his term “relative deprivation,” which is the discrepancy between what people think they deserve and what they actually think they can get. He comes up with the analysis that just as frustration produces aggressive behavior on the part of an individual, so too does relative deprivation predict collective violence by social groups.²⁹ On similar lines, the research of Brynjar and Skjolberg also explains that the widespread perceptions of deprivation and inequality, especially among culturally defined groups, serve as the basic condition for participation in collective civil violence, and that terrorism may become an integral part of this violence.³⁰ The relative deprivation theories dwell on the inequalities that arise from disequilibrium in the social, economic, and political status of groups and individuals that manifest themselves into aggressive, anti-state and anti-humanity behavior leading toward the acceptance of violence as a valid facilitator for voicing their concerns.

b. *Diffusion Theory*

Diffusion from the view-point of a physical phenomenon is the process that identifies the migration and intermingling of molecules and atoms and in a broader perspective may be defined as the process in which there is movement of a substance from an area of high concentration of that substance to an area of lower concentration. From sociology and an anthropological perspective, *diffusion* may be viewed as the transmission of elements or features

²⁹ Ted Gurr, *Why Men Rebel* (Princeton, NJ: Princeton University Press, 1970).

³⁰ Brynjar and Skjolberg, “Causes of Terrorism,” 11, 70.

of one culture to another. Everett Rogers seminal study on diffusion of innovations elucidates how, why and at what rate ideas and technology spreads through cultures³¹. Rogers defines *diffusion* as: *the process by which innovation is communicated through certain channels over time among members of a social system, and is a special type of communication concerned with the spread of messages that are perceived as new ideas*. A similar understanding of terrorist networks, their tactics and *innovations*, are seen to *diffuse* through geographical boundaries, regions, cultures and societies.

The occurrence and prevalence of terrorism in one country often leads directly or indirectly to more terrorism in neighboring countries. Terrorists have the potential and wherewithal to learn and respond to new counter-terrorism strategies and tactics, and to emulate such tactics in geographically adjacent areas.³² The diffusion theory is quite evident in today's world. If we take a sample of countries that may be regarded as '*the hub-centers of terrorism*,' their impact is often visible in the neighboring countries of the region. If we take the example of Pakistan-Afghanistan, terrorism is found prevalent in Iran, India, Western China, etc. Similar is the case, if we take the example of Iraq or Somalia. The diffusion theory in respect of terrorism is visible in the tactics and strategies adopted by terrorists, decisions to choose the medium of attack and timings, ways and means adopted for exploitation of media, and arms and explosives used by terrorists. This then provides us with a collaborative and cooperative approach that is visible amongst diverse terrorist groups and their trans-national linkages. The National Security Advisor of India, during his speech at the 43rd Conference on Security Policy in Munich from February 9–11, 2007 brought out quite lucidly the trans-national linkages of terrorist networks.

³¹ Everett M. Rogers, *Diffusion of Innovations* 5th Ed. (New York: Free Press, 2003).

³² Brynjar and Skjolberg, "Causes of Terrorism," 17-21, 70. The authors mention this as part of *Contagion Theory* wherein the communication networks may be considered as conduits for "infectious" attitudes and behavior. I tend to agree more with Everett Rogers perspective of *diffusion of innovation* to be more relevant, and hence included the *Diffusion Theory* as one of the root causes of terrorism.

*World-wide, operations of terrorist groups reveal dangerous patterns. An entirely new breed of terrorists has emerged. Terrorist outfits today have a trans-national reach. New cells and new franchises are evolving. New support structures and financing mechanisms are being created. Passing of messages is becoming more sophisticated. Terrorist outfits are no longer tethered to geographical locations, or for that matter, even to political ideologies. Captured militants reveal that it has been possible to acculturate recruits coming from different climes, backgrounds, skills and countries. Such cross-cultural compatibility is paving the way for deadly attacks in unexpected locales in the future.*³³

A similar concern with respect to terrorism is voiced by terrorism expert Martha Crenshaw in a number of her research papers and books, and which could fall into the category of diffusion theory.

*Terrorist organizations frequently have direct, physical contacts with other terrorist groups and with foreign countries. Collaboration extends to buying weapons, finding asylum, obtaining passports, and false documents, acquiring funds, and sometimes rendering assistance in the planning and execution of terrorist attacks.[...] it means that transnational links among groups with shared aims make terrorism in one state likely to lead to terrorism in nearby states.*³⁴

The trans-nation linkages and the consequent growth of terrorism have also been opined by proponents of terrorism as a '*networked phenomenon*' in this information age.³⁵ The growth of networks in general, is mainly due to their ability to inter-connect and emulate and such is the case with terrorist networks that fall accurately in the diffusion theory within this perspective.

³³ M. K. Naryanan, National Security Advisor, India, Speech at the 43rd Conference on Security Policy, Munich, Feb 9-11, 2007 [on-line], copy of the speech available from <http://www.securityconference.de/konferenzen/rede.php?sprache=en&id=198&>; accessed Feb 25, 2007.

³⁴ Martha Crenshaw, ed., *Terrorism, Legitimacy and Power* (Middletown, Connecticut: Wesleyan University Press, 1983).

³⁵ John Arquilla, David Ronfeldt and Michele Zanini, "Networks, Netwar, and Information-Age Terrorism," in *Countering the New Terrorism*, Ian O. Lesser, Bruce Hoffman, John Arquilla, David Ronfeldt, Michele Zanini, Brian Michael Jenkins, RAND publication, 1999 [on-line], available from http://www.rand.org/pubs/monograph_reports/MR989/; accessed Dec 28, 2006.

c. Globalization, Modernization and Cultural Confusion

Globalization is most commonly associated with the development of global production and markets, and their social, political, and cultural consequences. Globalization is characterized by economic integration and interdependence, liberalization, and moving away from state control on movements of capital, labor, knowledge, and technology.³⁶ Globalization is being regarded as a negative force in many of the emerging economies including Islamic states, as a potential force moving these states towards capitalism. That in turn, is seen as the force behind the cultural upheavals that are prevalent in their respective societies, especially to the uneven spread of the benefits from globalization. This inequality and deprivation within certain groups is a source of unrest and tension that may manifest into aggressive violent expression toward the state and society, and may lead to choosing terrorism as an alternative. Gotchev argues, in his paper, that globalization does not cause terrorism but creates opportunities and facilitates its emergence.³⁷

Rohan Gunaratna, a renowned academician on terrorism is also of the view that '*forces of globalization have facilitated the rise, growth, mobility and access to special weapons/dual technologies of terrorist groups.*'³⁸ The rate of modernization, in terms of adaptation to modern values of governance and economy, is not being absorbed at the same rapid rate by societies that have long lived in a closed and confined environment. This has led societies to be fragmented with growth in social inequalities, grave damage to the environment, and resource wars due to explosive growth in the exports of certain commodities such as oil. As Brynjar and Skjolberg point out, the societal changes associated with modernization create new and unprecedented conditions for terrorism such as a multitude of targets, mobility, communications, anonymity, and audiences.³⁹ Modernization in many parts of the Islamic world is being seen as the force that

³⁶ Atnas Gotchev, "Terrorism and Globalization," in *The Roots of Terrorism*, ed. Louise Richardson (New York: Routledge, 2006), 103.

³⁷ Atnas Gotchev, "Terrorism and Globalization."

³⁸ Rohan Gunaratna, ed. *The Changing Face of Terrorism* (Singapore: Marshall Cavendish, 2005).

³⁹ Brynjar and Skjolberg, "Causes of Terrorism."

is propelling the Islamic societies away from their roots, religion, and culture. This, in general, is leading them toward a '*cultural confusion*' that may be seen as an environment in which terrorism finds ideal grounds to breed and propagate.

d. Weak and Collapsed States

Weak and collapsed states are generally the states in transition and those that are undergoing a structural transformation, constant leadership struggles, those that are trying to emerge from an established tribal and fragmented background, or those where all the institutions of governance have collapsed. A case in point is Somalia, which is characterized as a state in constant transition from tribal leaders and warlords to powerful Islamic clerics. The influences of an appealing ideology in such societies lead to many amongst the population to adapt to the notion of terrorism as an alternative for wielding power and control. These are the very countries that provide a safe haven, an extensive training ground, and robust terrorist export machinery for regions all over the world.⁴⁰ As Brynjar and Skjolberg remark, '*the existence of weak and collapsed states are a potential breeding grounds for instability, mass migration, and murder.*'⁴¹ A number of potential candidates are also emerging on the horizon like Bangladesh and Pakistan; these are the states that are in the turbulent transitory phase of evolution and the government and societies therein are influenced by strong radical Islamic fundamentalism. The associated expatriate communities originating from these countries are showing a strain due to social alienation in their adopted countries, and are hence vulnerable to radical Islamic ideology. One example of this is the unstable migrant population from these countries into Great Britain that has come to light as an aftermath of the London train bombings on July 7, 2005, and the consequent crackdown on radical Islamic movement in the country.⁴² Few scholars have given a

⁴⁰ John H Poole, *Terrorist Trail* (Emerald Isle, NC: Posterity Press, 2006).

⁴¹ Brynjar and Skjolberg, "Causes of Terrorism," 61-63.

⁴² For detailed discussion on the London Train Bombing and the following investigation, the website on the subject hosted by the BBC contains important reports and is available from http://news.bbc.co.uk/2/hi/in_depth/uk/2005/london_explosions/default.stm

perspective of Al Qaeda being a '*dune type organization*,'⁴³ that finds a place for itself to establish from time to time. The constant endeavor of the terrorist organizations has been to search for *greener pastures*—from Somalia to Afghanistan to Pakistan—to establish a foot-hold, and to reorganize and adapt. Weak and collapsed states provide the necessary structure and environment for such an effort.

e. Political Alienation

Political alienation is one of the factors mentioned in the National Security Strategy of the United States of America that is responsible for the terrorism that we confront today. The groups and individuals who are without any rights towards their government tend to feel marginalized and are hence *vulnerable to manipulation by those who advocate a perverse vision based on violence and destruction*.⁴⁴ A similar view is solicited by Brynjar and Skjolberg, wherein they believe that the lack of continuity of the political system and the lack of integration of political fringes is a factor for encouraging ideological terrorism.⁴⁵ The total disregard of valid grievances of a group of people by the political regime creates a vulnerable zone, and provides grounds where these people could fall prey to violence and aggressive means to project their issues.

f. Emergence of Mass Media as a Platform for Advertisement of Grievances

Mass media have re-defined the *way of life* for people all over the world and mass media now form an integral part of the world societal system. The term mass media has been used here in the context of modern means of media including modern methods of communication. Mass media have helped shape the nature of modern conflicts and how people view events and happenings around them with differing perspectives on the way it is being

⁴³ Shaul Mishal and Maoz Rosenthal, "Al Qaeda as a Dune Organization: Toward a Typology of Islamic Terrorist Organizations," *Studies in Conflict and Terrorism*, Vol. 28, 2005, 275-293.

⁴⁴ United States of America. "The National Security Strategy of the United States of America." Mar 2006, 10.

⁴⁵ Brynjar and Skjolberg, "Causes of Terrorism."

projected to them. Therefore, public opinion has become an integral part of state policies and dictum. There seems to be a constant struggle as to how different people perceive the coverage of terrorist acts by the media. The members of the media have two competing and contradictory roles: controlling the flow of information while, at the same time, making the information 'saleable.'⁴⁶

The ability of terrorists to exploit the media to their benefit, in terms of shaping public opinion, and as a platform for advertising their deeds, arises from the ability of media to absorb such events. Two recent examples come to mind. One is the hijacking of Indian Airlines flight 714 from New Delhi to Kandahar where the projection of images in the media and a hostile public opinion led to the release of the terrorists by the Government of India. The other example involves Israel and the United States of America and the hijacking of the TWA airliner in Beirut. Some analysts point toward the contagion effect of mass media and its ability to spread terrorism.⁴⁷ A few have totally disregarded such a suggestion,⁴⁸ but most scholars generally agree that *mass media is not the cause of terrorism per se, but it has a considerable impact on the patterns of terrorism.*⁴⁹ The former British Prime Minister Margaret Thatcher spoke eloquently about the dependence of terrorists on media; she called it the 'oxygen of publicity.' Brynjar and Skjolberg also point out in their report that the *symbiotic relationship between modern mass media and terrorism is seen as a major force behind the rising lethality of international terrorism over the last decades.*⁵⁰ Brigitte Nacos in her book *Mass-Mediated Terrorism* mentions that *publicity is as essential to terrorists as the air they breathe*⁵¹. Bruce Hoffman, a noted expert

⁴⁶ Johnathan R. White, *Terrorism: An Introduction*, 3rded. (Stamford, Connecticut: Wadsworth Thomas Learning, 2001), 256-266.

⁴⁷ Allan Mazur, "Bombs Threats and Mass Media: Evidence for a Theory of Suggestion," *American Sociological Review*, Vol. 47, 1982, 407-410.

⁴⁸ Philip Schlesinger, "Terrorism, the Media and the Liberal Democratic State: A Critique of Orthodoxy," *Social Research*, Vol. 48, 1981, 74-99.

⁴⁹ Brynjar and Skjolberg, "Causes of Terrorism," 44.

⁵⁰ Brynjar and Skjolberg, "Causes of Terrorism," 43-45.

⁵¹ Brigitte L. Nacos, *Mass-Mediated Terrorism* (New York: Rowman & Littlefield Publishers, Inc. 2002), 193.

on terrorism, is also of the opinion that the revolution of communication means that media is actually transforming the phenomenon of terrorism in different and ever-changing dimensions.⁵²

g. Ideology of Terror

Many analysts feel that one of the root causes of terrorism is the ideology that drives and motivates terrorists. Muhammad Hassan of the Institute of Defense and Strategic Studies, Singapore, has remarked that *terrorism is committed when opportunity, motivation, and capability meet and ideology is one of many elements that motivates a person to commit terrorism*. He also opines that the role of ideology is especially significant for Al Qaeda and its associates.⁵³ In another article, Dr. Stephen Biddle is of the opinion that the real enemy in the war against terrorism is not terrorism itself, but fundamentalist ideology. He equates terrorism as a mere tactic, and, identifies the center of gravity as what lies in the hearts and minds of politically uncommitted Muslims, and the ideology of terror.⁵⁴ Therefore, countering the ideology must form part of the information operations conducted against terrorists. The National Security Strategy of the United States of America also identifies ‘an *ideology that justifies murder*’ as one of the causes of terrorism and mentions the prevalence of an ideology that excuses or even glorifies the deliberate killing of innocents as a factor on which terrorism survives.⁵⁵

h. Religious Intolerance and Terrorism

In the last three decades, there has been an increase in the acts of violence that have religious undertones all across the globe. Mark

⁵² Bruce Hoffman, *Inside Terrorism*, revised and expanded ed (New York: Columbia University Press, 2006), 197-228.

⁵³ Muhammad Haniff Bin Hassan, “Key Consideration in Counter-Ideological Work Against Terrorist Ideology,” 541.

⁵⁴ Stephen Biddle, “War Aims and War Termination,” in *Defeating Terrorism: Strategic Issue Analyses*, Colonel John R. Martin, ed., Strategic Studies Institute, U.S. Army War College, Jan 2002, 7-8.

⁵⁵ United States of America. “The National Security Strategy of the United States of America.” Mar 2006, 10

Juergensmeyer feels that *each case in which religion has been linked to violence is different*.⁵⁶ Magnus Ranstorp observes that the wave linked to religious violence is unprecedented in its scope and selection of targets as well as in its lethality and indiscriminate character.⁵⁷ The rhetoric of religious teachings in Islam, by Al Qaeda and other Islamic terrorist groups, projects how religion and terrorism have become intertwined. The message of Osama bin Laden to the United States after the terrorist attacks of 9/11 is clearly religious in tone and content.

Praise be to God and we beseech him for help and forgiveness. We seek refuge with the Lord of our bad and evil doing. He whom God guides are rightly guided but he whom God leaves to stray, for him wilt thou find no protector to lead him the right way.

I witness that there is no God but God and Muhammad is his slave and prophet.

God Almighty hit the United States at its most vulnerable spot. He destroyed its greatest buildings. Praise be to God.

*Here is the United States, it was filled with terror from its north to its south and from its east to its west. Praise be to God.*⁵⁸

Such statements are prevalent in most of the terrorists' activities carried out by Islamist terrorists wherein they try to seek a refuge under religion for their violent and barbaric acts. The Islamic terrorists are now adept at paraphrasing religious scriptures and texts to justify violence and to project themselves as the savior of religion. Bruce Hoffman also notes that the religious terrorists view violence as a *sacramental act or divine duty executed in direct*

⁵⁶ Mark Juergensmeyer, "Religion as a Cause of Terrorism," in Louise Richardson, ed. *The Roots of Terrorism* (New York: Routledge, 2006), 133-144.

⁵⁷ Magnus Ranstorp, "Terrorism in the Name of Religion," in Russell D. Howard and Reid L. Sawyer, eds. *Terrorism and Counterterrorism: Understanding the New Security Environment*, revised and updated (Guilford, Connecticut: McGraw-Hill / Dushkin, 2004), 125-139.

⁵⁸ Osama bin Laden, pre-recorded video broadcast, Jan 7, 2001.

response to some theological demand or imperative.⁵⁹ Such an understanding removes all limits and boundaries for the act of violence perpetrated by such terrorists. Rohan Gunaratna claims that terrorist ideologues invest in ideological propaganda to indoctrinate the terrorists themselves, as well as to increase their support base. He believes that linkages to ideology and the morality of terrorism, in the larger perspective, is now quite common, that and by keeping the ideology alive, the world is likely to fight a multi-generational jihad campaign.⁶⁰ Samuel Huntington's theory about the clash of civilization also has religious connotations and points toward religious fanaticism as the cause of future global clashes.⁶¹

The religious intolerance issue was also highlighted by widespread protests in February 2006 against the publication of cartoons depicting the Prophet Mohammed. There were worldwide protests in the Muslim world as well as in the Western world. This view is validated by analyzing the polls conducted by the organization *Terror Free Tomorrow*, that observed that two-thirds of those surveyed in Saudi Arabia, Pakistan and Turkey, and a little over 50 percent in Palestine and United Arab Emirates, believe that the Danish cartoons of the Prophet Muhammad reflect Western antagonism against Islam itself.⁶² These events ferment the general antipathy of Muslims towards the Western world and are exploited by the Islamist terrorists for radicalization of the 'fence sitters.'⁶³ Most recently, David Ronfeldt, a RAND scholar, has provided an interesting

⁵⁹ Bruce Hoffman, *Inside Terrorism*, 88. An excellent discussion on secular and religious terrorists that draws out the differences between the two, and clearly identifies uncontrolled and more ghastly violence with the latter.

⁶⁰ Rohan Gunaratna, *The Changing Face of Terrorism*, 21.

⁶¹ Samuel Huntington, *The Clash of Civilizations and the Remaking of World Order* (New York: Simon and Schuster, 1996).

⁶² Terror Free Tomorrow, "New Polls throughout Muslim World: Humanitarian Leadership by US Remains Positive," polls conducted by Terror Free Tomorrow [on-line], available from <http://www.terrorfreetomorrow.org/upimagestft/irans%20Neighbors%20Poll%20Report.pdf>, accessed Feb 15, 2007. *Terror Free Tomorrow* is a non-partisan, not-for-profit organization established in Washington, D.C.

⁶³ James Wither, "A Work in Progress: The United Kingdom's Campaign Against Radicalization," *George C. Marshall – European Center for Security Studies*, Occasional Paper Series, No. 9, Feb 2007.

perspective wherein he has related the current volatile phenomenon seen in militant Islam to *tribalization of religion*.⁶⁴

i. Terrorism as a Business Enterprise

All terrorist groups need a structure and an organization of some form to provide them with the financial resources that finally manifests into ‘action on the ground.’ Money is required to mount a terrorist campaign. This support structure, in most cases, is run as a business enterprise. One example is the PLO financial wing, *Samed*, which uses modern organizational theories, providing economic benefits to the terrorists based on the category of operations undertaken. *Samed* is now in the business of building farms and factories and intends to become a strong economic force in the Middle East during the twenty-first century.⁶⁵ Another case in point is the Abu Nidal Group that functioned on the concept of ‘*for hire terrorists*’ and amassed vast wealth that they subsequently invested in commercial and real estate ventures and also in an international arms trading company.⁶⁶ The emphasis of Al Qaeda toward building a business infrastructure during its time in Sudan is indicative of the fact that terrorist groups require such an infrastructure for their support and growth. A business infrastructure also exists in Afghanistan-Pakistan, where terrorism is run as a business enterprise that affects the livelihood of many a common man. The trade in arms and ammunition, false and forged documents, media and publications, drug-peddling, etc, translates into a multi-million dollar industry worldwide. Terrorism fund-raising through organized criminal syndicates and NGOs working as front organizations is quite common, and a number of

⁶⁴ David Ronfeldt, “In Search of How Societies Work: Tribes — The First and Forever Form,” RAND working paper, Dec 2006 [on-line], available from http://www.rand.org/pubs/working_papers/2007/RAND_WR433.pdf, accessed Jan 10, 2007.

⁶⁵ Johnathan R. White, *Terrorism: An Introduction*, 41.

⁶⁶ Bruce Hoffman, *Inside Terrorism*, 259.

linkages are discovered from time to time. The targets of terrorist attacks in recent times indicate that the economic impact of such targets is also an important consideration.⁶⁷

j. Covert and Overt State Sponsorship

Use of terror tactics by the state was quite prevalent in the past (as discussed earlier), but in today's world, support to terrorist groups and networks is not acceptable, and is enshrined in a number of declarations to this effect through the United Nations.⁶⁸ Even though such declarations exist, many states pursue a policy of covert support and indirect policies. One of the models that describes state-level participation makes three distinctions in the form of *sponsors, enablers and cooperators*.⁶⁹ The state sponsorship is an intricate process wherein the state always leaves a *fall-back option*, in terms of 'deniability' when accused of sponsoring terrorism. The range of policy options available to a state that include supporting terrorism in some form are: ideological support, financial support, military support, operational support, logistical support, initiating terrorist acts, and direct involvement in terrorist attacks.⁷⁰ Benjamin Netanyahu, the former Prime Minister of Israel, in his book on *Fighting Terrorism: How Democracies Can Defeat the International Terrorist Network*, opines that '*there is no international terrorism without the support of sovereign states ... the entire scaffolding of international terrorism will collapse to dust (if this state*

⁶⁷ The attack on the World Trade Center had enormous economic ramifications. Osama bin Laden, from time to time, has exhorted his followers to '*hit the economy of the United States*' - "... It is important to hit the economy (of the United States), which is the base of its military power If the economy is hit they will become preoccupied. Similarly, the attack conducted by terrorists in the IT city of India, Bangalore, and the failed attempt on a Saudi refinery in the recent past, indicate extensive economic profiling by terrorists during the selection of their targets.

⁶⁸ United Nations has been working on a cohesive approach towards the problem of terrorism. A global counterterrorism strategy for the United Nations was adopted by all 192 Member States on Sep 8, 2006, and launched at a high-level meeting of the General Assembly on Sep 19, 2006. For more details see <http://www.un.org/terrorism/>.

⁶⁹ Paul R Pillar, *Terrorism and U.S Foreign Policy* (Washington, D.C: Brookings Institution Press, 2001), 157-198.

⁷⁰ Gus Martin, *Understanding Terrorism: Challenges, Perspectives and Issues*, 91.

support is removed).⁷¹ A similar view is expressed by noted Indian scholar, Brahma Chellaney: *'regimes that murder, maim, and menace the innocents are employing export of terrorism — like classical national power projection — as an indispensable component of state power.'*⁷² Notwithstanding such a viewpoint, terrorist organizations are seen to be more autonomous, but in many countries, these groups have joined the political mainstream as a policy toward proposed amalgamation into the mainstream, but still follow an extremist agenda. This is a dangerous trend and again provides a leeway for the state to covertly support terrorism as a policy toward its adversaries. The declining trend of overt and covert support of terrorism by states will definitely go a long way in defeating terrorism; hence shaping the information environment to achieve this becomes an important strategic objective.

k. Weakness of Democracy

The basic premise of democracy, *'of the people, by the people and for the people,'* along with equality, freedom, justice and a rule of law derives immense strength from its founding principles. But these very principles are being targeted by terrorists in democracies in their respective period of evolution the world over. Democracies are susceptible to terrorism; the examples of the oldest and the largest democracies in the world are at the forefront, and many transitional democracies are faced with threats as well. There is a growing perception that democracy is weak against the threat of terrorism and is not able to deal forcibly with such an issue due to the very ideals on which it is based⁷³. According to the National Security Strategy of the United States, the promotion of democracy is regarded as the end-all long-term solution to the transnational

⁷¹ Benjamin Netanyahu, *Fighting Terrorism: How Democracies Can Defeat the International Terrorist Network* (New York: Farrar, Straus and Giroux, 1995 / 2001).

⁷² Brahma Chellaney, "Fighting Terrorism in Southern Asia," *International Security*, Vol. 26, No. 3, winter 2001/02, 94-116. This contains a very informative description of overt and covert state sponsorship of terrorism and states some hard facts about terrorism in South Asia.

⁷³ Alan M. Dershowitz. *Why Terrorism Works: Understanding the Threat, Responding to Challenge* (New Haven: Yale University Press, 2002)

terrorism of today.⁷⁴ There needs to be a consistent approach by the United States in pursuing this goal, which till now, has been quite the opposite in its visibility. Establishment of democracy in the Muslim world wherein countries have been ruled by feudal lords, families and kings, dictators and despots is going to be a challenging task and may initially generate an additional load due to incessant attacks by terrorists.

I. Religious Education System in Islamic Nations

Another major factor that is responsible for the promotion of religious intolerance and Islamic terrorism, in particular, is the unbalanced education system in most Islamic countries in the form of madrasas. The evolution of radical Islam that began in the 1960s has only strengthened due to the powerful financial support by Saudi Arabia and other Gulf Countries that pumped in the large revenues from the petro-industry for creating centers of Islamic studies. The idea was to revive Islam and to create a global identity for Muslims that was appearing to be diminishing due to the integration of the benefits of modernization in Muslim societies. In due course, radical Islam began to emerge as the more vocal component through these Islamic centers and hence began the growth of Madrasas with the specific intent to teach radical Islam. Jason Burke, in his book, *Al Qaeda: Casting a Shadow of Terror*, mentions that the focus of the entire education system in the Middle East has a major element of religion, and therefore religious study, in all its forms, includes fundamentalist as well as liberal teachings. The fundamentalist views that are against the establishment and ordained through support in various Islamic scriptures, find greater numbers of sympathetic students.⁷⁵

The support provided by Saudi Arabia and other Gulf countries in establishing thousands of Madrasas in Pakistan and Afghanistan, has made them into schools for radicalization and teaching the explosive interpretation of

⁷⁴ United States of America. "The National Security Strategy of the United States of America." Mar 2006, 11.

⁷⁵ Jason Burke, *Al Qaeda: Casting the Shadow of Terror* (New York: I.B. Tauris, 2003), 245-248.

Islam.⁷⁶ Although some madrasas teach secular subjects, in general, madrasas offer a religious-based curriculum, focusing on the Quran and Islamic texts. Some analysts opine that a small group of radicalized madrasas, specifically located near the Afghanistan-Pakistan border, promote a militant form of Islam and teach their Muslim students to fight nonbelievers and *infidels*.⁷⁷ Similar expressions are found in the book, *Three Cups of Tea*, which has nothing to do with terrorism, but dwells deeply on the real-life experiences of Greg Mortenson when he attended religious schools in Pakistan, especially the *Wahhabi madrasas*, and his efforts in starting schools with no religious undertones. This book, too, paints a similar picture.⁷⁸ Mortenson's remarks in the book, "*I don't want to teach Pakistan's children to think like Americans. I just want them to have a balanced, non-extremist education,*" say a lot about the distorted education system. The unbalanced curriculum in madrasas are bound to produce individuals who, in due course, feel alienated and isolated in today's world due to the lack of skills and education required to fit into the global community. Such isolation leads to their trying to find refuge in the more fundamentalist forms of religious teachings, which may lead to their acceptance of violence. The other viewpoint is that all the high-profile terrorists are known to be adequately or highly educated,⁷⁹ but the opposite viewpoint is that these madrasas are producing the *cannon fodder* that is so very essential for the sustenance of the *jihadi* brand of Islamic terrorism.

⁷⁶ Daniel Benjamin and Steven Simon, *The Next Attack: The Failure of the War on Terror and a Strategy for Getting it Right* (New York: Times Books, 2005).

⁷⁷ Husain Haqqani, "Islam's Medieval Outposts," *Foreign Policy* no. 133, Nov/Dec 2002; Anna Kuchment et al., "School by the Book," *Newsweek*, March 11, 2002.

⁷⁸ Greg Mortenson and David Oliver Relin, *Three Cups of Tea: A One Man's Mission to Fight Terrorism and Build Nations... One School at a Time* (New York: Viking, 2006). Additional information on Greg Mortenson's mission in Pakistan-Afghanistan and his book is found at <http://www.threecupsof tea.com> and at <http://www.ikat.org>

⁷⁹ Most of the 26 Most Wanted Terrorists by the United States have an adequately high educational background. <http://www.fbi.gov/wanted/terrorists/fugitives.htm>. In case of Al Qaeda, the top leaders that are on the run and the ones that are captured, belong to the category of highly educated individuals. Similar view is also expressed by ex CIA operative and scholar, Marc Sageman, in his paper titled "Understanding Terror Networks," Nov 1, 2004 [on-line], available at <http://www.fpri.org/enotes/20041101.middleeast.sageman.understandingterrornetworks.html>.

If you are thinking a year ahead, sow seed, If you are thinking ten years ahead, plant a tree. If you are thinking one hundred years ahead, educate the people.

— Kuan Tzu, Chinese Poet, c. 500 B.C.

m. Ongoing Conflicts and Foreign Occupation in the Muslim World

The Muslim world, in general, is antagonized by the policies of the Western world toward the resolution of conflicts in the Middle East region and elsewhere in the world. The Israeli-Palestine conflict is a sore point, although the failure of the Western world to resolve the issue is not the cause of specific terrorist attacks, but it is seen as a source of Arab resentment that fuels violent passions against the Western world in general, and Western policies in particular. The question of morality, justice, respect and double-standards are words that invoke emotional violent responses in the Muslim world. It is also the source of much Arab resentment and undermines the moral authority of the U.S. war on terrorism.⁸⁰ These unresolved conflicts also provide the theme for garnering support in the Muslim world by the Islamist terrorists and assist in their recruitment drives. The ‘*war zones*’ around the world that have Muslims fighting against non-Muslims and portrayed as the ‘*lands of Jihad*,’ provide a steady supply of battle hardened fundamentalist veterans, a source of inspiration to sympathetic diaspora communities,⁸¹ and a sense of adventure amongst the minds of young Muslims who may be willing to join the *bandwagon*. The involvement of foreign troops in Muslim lands has been a source of Islamist propaganda and provides a valid reason for joining the *Jihad*—as supporters or as active participants. The continuance of long ending regional conflicts and unwarranted foreign occupation are major catalysts for the propaganda mechanism for Islamist terrorists and a reason for continuance of their cause.

⁸⁰ Colonel Thomas Freeman Jr., United States Army, “Winning the War of Ideas in the Global War on Terrorism,” *United States Army War College – Strategic Research Project*, Carlisle Barracks, Pennsylvania, May 3, 2004.

⁸¹ Brynjar and Skjolberg, “Causes of Terrorism,” 65-70.

3. Analysis of Causes of Terrorism from the Perspective of Islamist Terrorism

The theme behind this analysis is to identify and group the causes of terrorism, based on their relative proximity, so that a cohesive information strategy can be adopted to invalidate the group, and to further organize these groups to the relevancy that they associate with Islamist terrorists. The grouping of causes and their associated relevancy will help us in identifying priority areas that we need to concentrate on while defining a strategy for the war of ideas and for shaping the information environment. The grouping that emerges as most relevant, in the context of Islamist terrorists, requires the utilization of information operations as the dominant part of the strategy operations against terrorist organizations and networks.

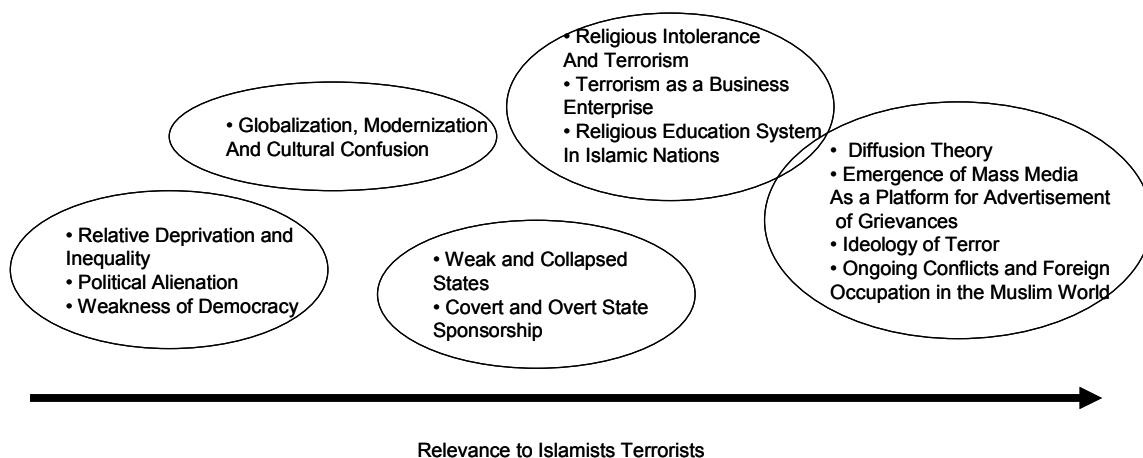


Figure 1. Grouping and Relevance of Causes of Terrorism.

Another means of analyzing the causes of terrorism is to view them in the context of Afghanistan and Iraq to see whether the causes, as highlighted, actually fit into the present ground conditions. Table 1 highlight that most of the *root causes of terrorism* do exist in both Afghanistan and Iraq, although in Afghanistan the conditions of the roots causes of terrorism are seen to exist more dominantly. In the case of Iraq, the causes seem to manifest after the invasion of Iraq by the United States-led coalition force.

Causes of Terrorism	Afghanistan (Prior to OEF)	Iraq (Prior to OIF)
Relative Deprivation and Inequality	++	+
Diffusion Theory	+++	+
Globalization, Modernization and Cultural Confusion	++	+
Weak and Collapsed States	++	+
Political Alienation	++	+
Emergence of Mass Media as a Platform for Advertisement of Grievances	++	+
Ideology of Terror	++	+
Terrorism as a Business Enterprise	++	-
Religious Intolerance and Terrorism	++	+
Covert and Overt State Sponsorship	+++	+
Weakness of Democracy	+	+
Religious Education System in Islamic Nations	++	-
Ongoing Conflicts and Foreign Occupation in the Muslim World	++	+

Table 1. Afghanistan and Iraq — Benchmarked to the Causes of Terrorism.⁸²

⁸² The number of + / - signs indicates the degree to which the parameter for root causes of terrorism is seen in the context of the countries under consideration.

4. Terrorism: A War of Ideas

An idea (Greek: ἰδέα, from eidon: I saw) is an image existing or formed in the mind. The human capacity to contemplate ideas is associated with the capacity for reason, self-reflection, and the ability to acquire and apply intellect. Ideas give rise to concepts, which are the basis for any kind of knowledge whether science or philosophy.

(Source: *Wikipedia*, <http://en.wikipedia.org/wiki/Idea>)

It would be easier to subjugate the entire Universe through force than the minds of a single village.

— Voltaire

The French author, Victor Hugo, gave us the following very expressive quote: *'Ideas are more powerful than all the armies of the world.'* Ideas are seen as the instigators that invoke strong passions and spark revolutions. The *Cold War* in the last century is supposedly the longest *war* in recent times, whereas the ideas of communism and totalitarianism, established by Karl Marx, collapsed at the hands of a more powerful idea that offered a better alternative, one based on political and personal freedom combined with economic prosperity. Hence, as Lawrence Reed, an economist, in his paper titled "The Importance of Ideas," observes that, *'Change ideas, and you can change the course of history'* and he further states that, *'Investing in ideas – the right ones, not just any ideas – is a long-term investment, but one that has a return every bit as tangible as the purchase of stock.'*⁸³ The importance of ideas in the 'war of terror' is highlighted in the collection of essays by Robert Satloff titled *'The Battle of Ideas in the War on Terror.'*⁸⁴ The 'war of ideas,' as it relates to the jihadi fundamentalism that we

⁸³ Lawrence W. Reed, "The Importance of Ideas" [on-line], available from <http://www.mackinac.org/article.aspx?ID=4054>

⁸⁴ Robert Satloff, *The Battle of Ideas in the War on Terror* (The Washington Institute for Near East Policy, 2004). The book has a nice collection of essays dealing with the war of ideas, winning the hearts and minds, utilization of public diplomacy as a potent tool to propagate our own ideas, as well as discounting the ideas of the Islamist terrorists and comes up with a conclusion that the United States and its allies need to *'fight the fight'* e.g., the, ideas vs ideas battle.

are facing today, is a constant struggle at the ideological level between the jihadis on one side and the United States-led forces on the other. It is now perceived more and more as a debate that pits extremist ideology in the Muslim world against the values of freedom and tolerance,⁸⁵ and could be viewed as a constant effort to *'shape the information environment to gain an information advantage.'* The United States and its allies have a number of terms that have been defined in the past to support such a conflict, but all those terms — political warfare, strategic influence, propaganda and psychological operations — fall short in the context of the war of ideas that we are facing today. As William Rosenau, a political scientist at RAND Corporation remarks, *"... what we are left with, then, is a variety of words and phrases, no one of which is sufficient for capturing the essence of our objective, that is, - prevailing in the longer term over the ideology that gives rise to Islamist terrorism."*⁸⁶

Another interesting concept signifying the powerful nature of *'ideas'* is from the field of economics wherein a number of growth models based on ideas have been promulgated. In economic terms, *'ideas'* are considered as non-rivalrous, implying that one person's use of the good (idea in this case) does not diminish another's use. As an example, once a computer chip has been designed and a facility established, the same facility can be replicated in different parts of the world with less effort and without any change of idea (in this case the design of the computer chip). As a case, we consider a production function of the form

$$Y = F(A, X)$$

where Y is the output, A is an index of the amount of knowledge that has been discovered, and X is the remaining input into production. Now, in case the production needs to be doubled, then without changing A and by merely

⁸⁵ Pamela Hess, "Analysis: U.S. War of Ideas," *UPI*, Jan 7, 2007. United Press International [on-line], available from <http://www.upi.com/SecurityTerrorism/view.php?StoryID=20070104-061232-1070r>

⁸⁶ William Rosenau, "Waging the "War of Ideas." RAND Corporation, 2006. This paper discusses the inadequacy of the current terminology due to the fact that it was conceptualized with a different environment in mind and hence the focus and approach do not suit the current "War of Ideas" that we are witnessing today. This paper also forms Chapter 72 of the McGraw-Hill book titled *Homeland Security Handbook* by Thomas Kamien. The paper is available from http://www.rand.org/pubs/reprints/2006/RAND_RP1218.pdf

increasing X, we can obtain the desired result.⁸⁷ Hence, non-rivalry of ideas or knowledge derives increasing return. Analogous to this concept, the ideology that drives terrorism, and in particular Islamist terrorism, has the ability and power of replication merely by changing inputs such as suitability of environment, availability of recruits, etc. the inputs that are derived from the root causes of terrorism. The ideology in this case remains a constant and as appealing as ever. The output (in this case Islamist terrorism) is therefore able to increase until the time there does not exist a more powerful or rival idea that dominates over its knowledge base, and in my opinion, that's the crux of the '*war of ideas*' that we need to focus on. What we then need is '*idea practitioners*,'⁸⁸ people who can scan and identify the correct idea, package the idea, advocate the idea, take the idea outside and make things happen. The '*war of ideas*' is also intricately related to the surrounding environment, which implies that the actions in the physical domain, including military actions, also have their hit in the ideological domain. For this reason,, the concept of the '*war of ideas*' needs to be amalgamated in the overall sense, and actions undertaken in the physical domain need to be valued by their impact in the information domain.

David Frum and Richard Perle, in their bestselling book, *An End to Evil*, remark, "*The war against extremist Islam is as much an ideological war as the Cold War ever was...terrorists, in other words, are motivated by ideology. Discredit the ideology and you defeat the terrorists.*"⁸⁹ The converse of this statement could also be regarded as true—if our own ideals are discredited or dishonored by our own behavior, the repercussions are likely to damage our efforts toward the war on terror. Hence, there needs to be an equal effort toward discrediting the ideology of terror, while at the same time, avoiding actions that

⁸⁷ Charles I. Jones, "Growth and Ideas," Working Paper 10767, National Bureau of Economic Research, Inc., Cambridge, Massachusetts, Sep 2004 [on-line], available from <http://www.nber.org/papers/w10767>

The example of the computer chip above has been taken from the book.

⁸⁸ Thomas H. Davenport, Laurence Prusak and H. James Wilson, "What's the Big Idea?" Harvard Business School Press, Boston, Massachusetts, 2003.

⁸⁹ David Frum and Richard Perle, *An End to Evil* (New York: Ballantine Books, Oct 2004) 125 and 201.

would lead to discrediting our own ideas. In order to understand the very nature of the *war of ideas*, we need to characterize the ideas in the context of terrorism and view the battle of ideas from the perspective of both—the Jihadi terrorists as well as the global coalition that is fighting the war on terror.

What we are confronting here is an evil ideology. It is not a clash of civilizations - all civilized people, Muslim or other, feel revulsion at it. But it is a global struggle and it is a battle of ideas, hearts and minds, both within Islam and outside it. This is the battle that must be won, a battle not just about the terrorist methods, but their views. Not just about their barbaric acts, but their barbaric ideas. Not only what they do, but what they think and the thinking they would impose on others.

— Tony Blair, Former Prime Minister, United Kingdom

a. 'Ideas' from the Terrorist's Perspective

Terrorist organizations worldwide have their specific motivations, political objectives, and ideology, based on which they commit violent actions. This section deals with the very *ideas* behind the Islamist terrorist organizations in general, and will focus especially on Al Qaida and its ideology. The answer that we seek is: what are the ideas or the ideology that propels these groups to resort to violent acts? And what are these '*saleable*' ideas based on, from which they are deriving their strength and support? This will define the information environment that the United States and its allies are facing and in which they will have to operate in the foreseeable future.

Since 9/11, many of the Islamist terrorist groups have been drawn to Al Qaeda's ideology, and now they have two distinct characters, a local character based on their original ideology, motivations, and political ambitions, and a global character that aligns with the ideology of Al Qaeda, which includes opposition to the United States and its allies.⁹⁰ Hence, the phenomenon of Islamist terrorism will be difficult to view from an isolationist standpoint, a case

⁹⁰ Rohan Gunaratna, "The New Face of Al Qaeda: Understanding the Generational Gradient in Local and Global Jihad Campaigns," International Center for Political Violence and Terrorism Research, Nanyang Technological University, Singapore [on-line], available from <http://www.pvtr.org/pdf/Multi-generational.pdf>

where the United States and its allies can focus on the Islamist terrorist groups affecting only them will be hard to fathom and understand by nations dealing with a similar menace, and in my view, will be a short-term and myopic approach. The major *ideas* that are governing the global Islamist terrorist movements are:

- **Creation of a Muslim *Umma*⁹¹**

A worldwide Islamic nation and brotherhood that propels the Muslims against the rest of the world, in simplistic forms, pits the believers (in Islam) against the non-believers. The creation of a Muslim Caliphate to attain glory for all Muslims and Islam is an important self-belief in these terrorists. The establishment of a theocratic Muslim world that will have solidarity based on religion is the main idea. This interpretation of the Islamist terrorists coincides with the Huntington theory based on his famous article, "The Clash of Civilizations," wherein future large scale clashes are forecast between civilizations and not between states in particular.⁹² The target in this case is the Western civilization, which has the United States of America at the forefront.

Nation states will remain the most powerful actors in world affairs, but the principal conflicts of global politics will occur between nations and groups of different civilizations. The clash of civilizations will dominate global politics. The fault lines between civilizations will be the battle lines of the future.

Samuel Huntington, The Clash of Civilizations, 1993

⁹¹ Umma (Arabic: أمة) is an Arabic word meaning community or nation. It is commonly used to mean either the collective nation of Islamic states or (in the context of pan-arabism) the whole Arab nation. In the context of Islam, the word umma (often spelled ummah) is used to mean the diaspora or community of the believers (ummat al-mu'minin), and thus the whole Islamic world. <http://en.wikipedia.org/wiki/Ummah>

⁹² Samuel Huntington, "Clash of Civilizations," *Foreign Affairs*, 72(3), Summer 1993, 22-24.

- **Jihad⁹³ based on Violent Means**

The *idea* of Jihad motivates the Islamist terrorists to perpetrate violence on civilians as a means for establishing Muslim rights and glory. The term Jihad is applicable to both non-violent and violent struggles for oneself and for Islam. The identification of the term, by the terrorists, to profess non-violent action, is likely to have an adverse effect on the general Islamic public that could, in due course, relegate Jihad to only non-violent action. Such is the case with the Western public wherein Jihad is now being identified with Islamist terrorism. Sayid Qutb describes Jihad as a generational campaign: *"The scope of this struggle is not limited to this earth or to this life. The observers of this struggle are not merely a generation of men."*⁹⁴ This connotation of *Jihad* projects Islamist terrorism into an everlasting and an ever-growing conflict. Rohan Gunaratna argues that, *"As long as the terrorist ideology that 'it is the duty of every good Muslim to wage Jihad' has validity, Islamist terrorist groups will appear and disappear."*⁹⁵ A similar view is visible from the perspective of American public opinion wherein 58 percent of respondents to a survey held in March 2006, indicate that Islam has more violent extremists than other religions.⁹⁶

⁹³ Jihad (Arabic: جهاد ḡihād) is an Islamic term, literally meaning struggle in the way of God. Within the realms of Islamic jurisprudence, jihad usually refers to military exertion against non-Muslim combatants. In broader usage and interpretation, the term has accrued both violent and non-violent meanings. It can refer to striving to live a moral and virtuous life, to spreading and defending Islam, and to fighting injustice and oppression, among other usages. Jihad is also used to mean the struggle for or defense of Islam. The primary aim of jihad is not the conversion of non-Muslims to Islam by force, but rather the expansion and defense of the Islamic state. <http://en.wikipedia.org/wiki/Jihad>

⁹⁴ Sayyid Qutb, "Jihad in the Cause of God," as part of collection of essay by Andrew G. Boston, ed., in "The legacy of Jihad: The Islamic Holy-War and the Fate of Non-Muslims," New York: Prometheus Books, 2005.

⁹⁵ Rohan Gunaratna, "The New Face of Al Qaeda: Understanding the Generational Gradient in Local and Global Jihad Campaigns."

⁹⁶ Claudia Deane and Darryl Fears, "Negative Perception of Islam Increasing," *Washington Post*, Mar 9, 2006, A01 [on-line], available from <http://www.washingtonpost.com/wp-dyn/content/article/2006/03/08/AR2006030802221.html>.

- **Religion as the Basis of Human Existence and Islam as the Only Acceptable Religion**

All the major Islamic terrorist groups and their leaders advocate the importance of their religion and insist on the idea of following the true Islam. In every statement coming out of these terrorists groups, as well as Al Qaeda, verses of the Quran, quotes from the Prophet's tradition (*hadits*), and opinions of classical Muslim scholars are twisted and turned to justify their cause as well as to commit violent activities.⁹⁷ As Bruce Hoffaman observes, most of the terrorist groups have a strong religious component and that '*the religious imperative for terrorism is the most important defining characteristic of terrorist activity today.*⁹⁸' In terms of the major terrorist acts in the past decade, most can be attributed to terrorist groups with strong religious motivations.

We seek His help and ask for His pardon. We take refuge in Allah from our wrongs and bad deeds.... I bear witness that there is no God except Allah, no associates with Him and I bear witness that Muhammad is His slave and messenger...

— Osama bin Laden

.. has become obligatory upon each and every Muslim ... The time has come when all the Muslims of the World, especially the youth, should unite and soar against kufr [non-believer] and continue Jihad till these forces are crushed to naught, all anti-Islamic forces and wiped out off the face of the earth and Islam takes over the whole world and all other false religions.

— Osama bin Laden

Islam as the only acceptable religion is an extremely popular idea that is propagated by the likes of Osama bin Laden, Maulana

⁹⁷ Muhammad Haniff Bin Hassan, "Key Considerations in Counter-Ideological Work Against Terrorist Ideology"

⁹⁸ Bruce Hoffman, *Inside Terrorism*, 82.

Massod Azhar, Hafeez Mohammad Hafiz Saeed, Ayman Al Zawahiri and many others – from big time Islamist terrorists to small time operatives.

- **United States of America as the Biggest Enemy of Islam and Muslims in the World**

I say to you the American people, according to the Koran ... your lives are lost, you will collapse, and America will collapse.

— Friday sermon at Tehran University titled "America will Collapse."

Allah has told us to make atom bombs. America is telling us not to. Who should we listen to O Muslims, Allah or America? Jihad, jihad, jihad is the answer.

— Mohammed Ishaq, one of the leaders of MMA⁹⁹

I have come here because my duty is to tell you that Muslims should not rest in peace until we have destroyed America and India.

— Hafiz Mohammad Saeed, chief of Lashkar-e-Tayyaba, at Jamia Ghousia mosque, Rawalpindi, Pakistan

The above quotes have been taken from an article written by Arnaud de Borchgrave titled "Oozing Venom and Jihad,"¹⁰⁰ that was in the *Washington Times* on August 25, 2004, and depicts the range of anti-

⁹⁹ Muttahida Majlis-e-Amal (MMA), the United Action Front, is an alliance initially headed by Maulana Shah Ahmed Noorani, leader of Jamiat Ulema-e-Pakistan. Its leaders are strongly opposed to the U.S.-led anti-terrorism campaign in neighboring Afghanistan that ousted the Taliban from power. The group believed Pakistani President Pervez Musharraf had become a tool of U.S. foreign policy. The MMA campaigned on promises to enforce Sharia law and in support of the withdrawal of U.S. forces based in Pakistan in the campaign against international terrorism. <http://www.globalsecurity.org/military/world/pakistan/mma.htm>. In the Pakistani parliament, the MMA, is a coalition opposition, formed after Pakistan became an ally of the United States of America in the "Global War on Terror." The coalition is united against the current government of President Pervez Musharraf because of his support for the United States' fight against what they consider to be global terrorism and allegedly putting the demands of the United States above the demands of his own people. http://en.wikipedia.org/wiki/Muttahida_Majlis-e-Amal

¹⁰⁰ Arnaud de Borchgrave, "Oozing Venom and Jihad," *Washington Times*, Aug 25, 2004 [on-line], available from <http://www.benadorassociates.com/article/6811>.

U.S. sentiments that are so well established in the Islamic world. The tapes of Osama bin Laden and Ayman Al Zawahari are one part, but such anti-U.S. sermons are now being heard all over the world, especially in the Muslim world, but also in many Western nations that have a considerable Muslim population. As Rohan Gunaratna remarks, *“After 9/11, especially after U.S. intervention in Iraq, hating and resenting the United States itself has become an ideology that has significant appeal throughout the Muslim world.”*¹⁰¹ The idea of fighting the most powerful nation has definite appeal for the Islamist terrorists.

- **Modernization and Globalization – Not Good to Islamic Society and Culture**

Islamist terrorists advocate anti-modernization, anti-globalization and anti-Westernization sentiments. The concepts of globalization and modernization are a new phenomenon in Islamic societies that are closed and regressive, and perceived as alien. Counter response by Islamist terrorists include the issuance of warnings and religion-based dictums for the Muslim population in an effort to discourage adopting such measures. Cultural clashes between the values cherished by Islam and those between the modern Western societies are on the rise. This is evident from the societal upheavals that are emerging in the United Kingdom and in other European nations that have a considerable Muslim population.

- **Exploitation of Natural Resources of Islamic Nations**

Another idea that finds great support with the Islamist terrorists is the notion that the United States and its allies are waging war on the Muslims in order to exploit the natural wealth of their countries, such as oil, and this idea is being used to gain support in the Muslim world.

¹⁰¹ Rohan Gunaratna, “The New Face of Al Qaeda.”

The importance of oil to the world, its need by all countries, and the availability of the resource in the Muslim world plays well to this idea.

We pray Iraqis will continue to resist American tyranny and terror and we believe victory will come to them. ... The invasion was motivated by U.S. designs to grab the oil of the Iraqi people and enslave them.

— Masood Azhar, chief of Jaish-e-Mohammad

b. 'Ideas' from the U.S. Perspective

In the long run, winning the war on terror means winning the battle of ideas.

— The National Security Strategy of the United States of America, Mar 2006

In the National Security Strategy of the United States, President George Bush remarks that '*America is at war*' against terrorism.¹⁰² The document provides the stated *ideas* that the United States is following in the war on terror, the successes, challenges, and opportunities toward a future world with peace and prosperity. The overall approach in the document has been defined as *pro-active* and *pre-emptive*, in terms of foreign policy and military operations, but in terms of the *war of ideas*, the approach is seen as *reactive*, and not meeting the laid-down goals. Also, the term *pre-emptive* means attacking in the face of imminent enemy strike. But the policy falls short of this goal, and the laid out strategy is more *preventive and less pre-emptive*. The same is highlighted by Donald Rumsfeld, the former Secretary of Defense:

¹⁰² George W. Bush Jr, President of the United States of America, "The National Security Strategy of the United States of America," Mar 16, 2006.

If I were grading I would say we probably deserve a 'D' or a 'D-plus' as a country as to how well we're doing in the battle of ideas that's taking place in the world today....I am not going to suggest that it's easy, but we have not found the formula as a country" for countering the extremists' message

— Donald H. Rumsfeld, Former Secretary of Defense, Army War College, Carlisle Barracks, PA, Mar 27, 2006.

A similar result was obtained during a survey conducted by the journal *Foreign Policy* in 2006 wherein they mapped a '*Terrorism Index*' by taking the views of 117 of the United States' prominent foreign policy experts. The experts are almost unanimous in their opinion that the *War on Terror* is going to be a long war and that the United States must win the 'war of ideas' by laying more emphasis on non-military tools.¹⁰³ An interesting finding of the survey is that 82 percent of experts feel that ending America's dependence on foreign oil may be the U.S. government's single most pressing priority in winning the war on terror. The 2007 Terrorism Index survey also follows a similar trend, wherein 82 percent of the experts agree that the United States has not shown any progress disseminating its message to the international public.¹⁰⁴

The question now is what are these *ideas* that the United States is following in the global war on terror and why are they failing? The major *ideas* subscribed by the United States and its allies in the global war on terror are:

¹⁰³ "Terrorism Index – 2006," *Foreign Policy*, Jul / Aug 2006 [on-line], available from http://www.foreignpolicy.com/issue_julyaug_2006/TI-index/index.html.

¹⁰⁴ "Terrorism Index – 2007," *Center for American Progress*, Feb 2007 [on-line], available from http://www.americanprogress.org/issues/2007/02/terrorism_index.html. The particular question ("Define the U.S. message to international publics") to the experts was in relation to the progress achieved on the implementation of the recommendations of the 9/11 Commission since Jul 2004 [on-line], available from http://www.foreignpolicy.com/story/cms.php?story_id=3700&page=2. The complete report is available from http://www.americanprogress.org/issues/2007/02/pdf/terrorism_index.pdf.

- **Advocacy of Democracy**

Democratization through military occupation has been a consistent policy of the United States.¹⁰⁵ Promotion of democracy is also described as the '*second pillar of confronting the challenges of our times*'¹⁰⁶ by President George Bush in the National Security Strategy, 2006. There is a growing debate on the efficacy of democracy as a viable political system within the Muslim world, and its being a parallel to the growing dissent in the Muslim world that is influenced by the calls of the Islamic terrorists about the Muslim *umma*. Democracy as the *idea* in the war of ideas is an acceptable concept, but non-existence of a successful secular model in the Muslim world makes it weak. The idea of democracy and freedom is being rejected by the Muslim world: '*more and more Muslims – and not just terrorists – believe that they will be looked down on in a U.S.-led world order.*'¹⁰⁷ A flexible democratic vision, modified and tailor-made for the Muslim world, that has its origin in the Muslim world, may be the *flag-bearer* of a democratic revolution that the United States so fervently exhorts. As David Lazarus highlights in his paper titled *From a War on Terror to a War of Ideas: 'any process of Middle East democratization carries with it undeniable risks of radical Islamic regimes on the Iranian model emerging,'* but the author also expresses that democracy is important in the long-term fight against terrorism.¹⁰⁸ Thomas Carothers argues that there are four major obstacles in the establishment of democracy in the

¹⁰⁵ James Kurth, "Ignoring History: U.S. Democratization in the Muslim World," *Foreign Policy Research Institute*, Spring 2005 [on-line], available from <http://www.fpri.org/orbis/4902/kurth.ignoringhistoryusmuslim.pdf>.

¹⁰⁶ George W. Bush Jr., President of the United States of America, "The National Security Strategy of the United States of America," Mar 16, 2006

¹⁰⁷ Zeyno Baran, "Fighting the War of Ideas," *Foreign Affairs*, Vol. 84, No. 6, Nov / Dec 2005, 72.

¹⁰⁸ David Lazarus, "From a War on Terror to a War of Ideas," *Australian Army Journal*, Vol. III, No. 1, Summer 2005-06 [on-line], available from http://www.defence.gov.au/army/lwsc/Publications/journal/AAJ_Summer_05_06/lazarus_ideas_AAJ_Summer_05_06.pdf.

Islamic states in Middle East. Firstly, there is no guarantee that democracy is the correct antidote to terrorism; secondly, opening up closed political systems in the region may fuel greater extremism in the short and medium term; thirdly, no discernible democratic strength in the region is visible; and fourthly, the United States does not sound credible propagating democracy when in the past, and even now, it actively supports authoritarian and semi-authoritarian regimes around the world.¹⁰⁹ Democracy takes time to establish and does have its tumultuous ways; the United States has taken almost 250 years to reach where it is today and to expect the Muslim world to accept such a system in *quick-time* may not be realistic. What needs to be kept in mind is that the process of creating a democracy does not involve major upheavals and pain.

Liberty and democracy become unholy when their hands are dyed red with innocent blood.

— Mahatma Gandhi

- **Freedom, Justice and Human Dignity**

The *idea* of promoting freedom, justice, and human dignity is defined as the '*first pillar*' of the National Security Strategy and is related to the end of tyranny through free governments, free and fair trade, and wise development policies.¹¹⁰ The emphasis on this *idea* is justifiable, but falls apart with the comity of nations due to the United States support of military dictators and tyrant leaders¹¹¹ from time to time. The *idea* of justice and dignity are more powerful than

¹⁰⁹ Thomas Carothers, "Democracy: Terrorism's Uncertain Antidote," *Current History*, Dec 2003, 403-406.

¹¹⁰ George W. Bush Jr., President of the United States of America, "The National Security Strategy of the United States of America," Mar 16, 2006

¹¹¹ The United States supported Saddam Hussein in the late 80s and early 90s, and then later did a volte-face. Similarly, the tacit and unflinching support to Pervez Musharaf draws contradictions to its stated policy.

democracy and freedom in the Muslim world,¹¹² but the prosecution of same lacks vision and an impartial approach. The events at Abu Gharib and the killing of innocent people in Iraq do not assist in any way the promotion of this *Idea*.

- **Multi-National Approach for Eradicating Terrorism**

The event of 9/11 galvanized a global response against terrorism; this was evident in the way member countries of the United Nations joined hands in condemning the ghastly attacks. The killing of innocents by terrorists always evokes negative responses worldwide, and may be taken as an opportunity to strengthen global alliance against terrorism. With each and every attack worldwide, the alliance needs to grow stronger. Events like the U.S.-led invasion of Iraq and its aftermath have not only made the alliance weaker, but have also given the Islamic terrorist an excellent opportunity to cement their viewpoints against the Western world. Many analysts subscribe to the *idea* that the War on Terror and the constituent war of ideas need to include a multi-national approach. The tentacles of Islamist terrorists have grown so wide, and the networks are so linked, that an individualistic approach may not bear expected results.

We are also guided by the conviction that no nation can build a safer, better world alone. Alliances and multilateral institutions can multiply the strength of freedom-loving nations. The United States is committed to lasting institutions like the United Nations, the World Trade Organization, the Organization of American States, and NATO as well as other long-standing alliances. Coalitions of the willing can augment these permanent institutions.

— President George W. Bush, The National Security
Strategy of the United States of America, 2002
(opening letter).

- **Humanitarian Assistance**

¹¹² Zeyno Baran, "Fighting the War of Ideas."

The *idea* of providing humanitarian assistance and relief to Muslim countries in their times of crisis is an important idea. Public opinion surveys carried out by *Terror Free Tomorrow* in Indonesia, Pakistan and Bangladesh, indicate that American aid is the single most important action that the people of the three Muslim countries want from the United States.¹¹³ The Tsunami Relief operations and the Earthquake Relief operations conducted by the United States in Indonesia and Pakistan, respectively, has had a profound impact on the public perception in those countries with respect to the United States of America.

Ideas – Islamist Terrorists	Scorecard	Ideas – United States & Allies	Scorecard
Creation of a Muslim <i>umma</i>	+ 4	Advocacy of Democracy	- 4
<i>Jihad</i> based on Violent Means	+ 5	Freedom, Justice and Human Dignity	+ 1
Religion as the Basis of Human Existence and Islam is the Only Acceptable Religion	+ 3	Multi-National Approach for Eradicating Terrorism	- 3
United States of America as the Biggest Enemy of Islam and Muslims in the World	++ 1	Humanitarian Assistance	+ 2
Modernization and Globalization – Not Good for Muslims	- 6	?	
Exploitation of Natural Resources of the Muslim Nations	++ 2	?	

Table 2. Scorecard of *Ideas*.¹¹⁴

¹¹³ Survey conducted by Terror Free Tomorrow in 2006 in Indonesia, Pakistan and Bangladesh. Complete details available from <http://www.terrorfreetomorrow.org/upimages/tft/Indonesia%20Bangladesh%20TFT%20Final%20Poll%20Report.pdf>

¹¹⁴ The + / - signs indicates positive and negative attributes of the perceived impact on the Muslim population and the number indicates the efficacy of the idea with '1' being the highest value and '6' being the lowest value. The question marks in the column of the United States and Allies indicate that it actually appears that there is a dearth of *ideas* and hence there is a need to focus effort towards identifying and propagating *ideas* that will find credibility and acceptance.

There are a number of *ideas* that need to be included in the war of ideas and given adequate coverage, namely economic prosperity, mutual respect, peaceful coexistence, religious tolerance and understanding, cherishing non-violent values, targeted humanitarian assistance, and a focused education reform program. These cannot be seen in isolation, but need to be amalgamated into foreign policy, military operations, and overall strategic philosophy. Replacing ‘non-violence’ and ‘violence’ for ‘truth’ and ‘falsehood’ in the quote below provides a powerful *idea*.

Let [Truth] and Falsehood grapple; who ever knew Truth put to the worse in a free and open encounter?

— John Milton, Areopagitica

B. INFORMATION OPERATIONS

The battlefield is a scene of constant chaos. The winner will be the one that best controls that chaos, both his and that of his enemy.

— Napoleon Bonaparte, 1769-1821

The value of information operations has emerged at the forefront of national strategic policy in the last decade. Information has always been regarded with knowledge and knowledge in turn associated with power. The power of information and the consequences it affords has demanded a greater prudence in associating information as an important resource at the strategic, operational, and tactical levels of a nation’s policy architecture. The relevancy of information has always been there, from time immemorial, but the delivery methods that now exist in this Information Age have transformed the way decisions are taken at all levels. The information in a tactical environment has its impact at the strategic level; an ‘*Information Episode*’ that takes place at a tactical level, transcends into a strategic domain within a very short period of time. An example in this regard is how the dragging of a U.S. soldier in the streets of Mogadishu in Somalia in 1993 immediately had a strategic

consequence that prompted the withdrawal of the U.S. forces from Somalia. Similar is the case with the live images of the terrorist attacks on September 11, 2001, beamed across the world, and the immediate bonding that it created amongst the nations of the world to focus their efforts on terrorism as a threat to humanity. Another example is how a fragile political situation and equally turbulent information environment in Spain, coupled with adequate use of media, was exploited by terrorists to launch an attack on trains in Madrid exactly two years and six months after 9/11, on March 11, 2004, that had as its consequence a regime change in Spain and the subsequent withdrawal of Spanish forces from Iraq.¹¹⁵ The battle of the information environment has now become extremely important in the prosecution of national policy decisions as well as in military operations.

Information operations, as an institutional concept, began in the early 1990s and were accompanied by the rapid advancement of technology. Information Operations came into focus through the seminal paper titled "*What is Information Warfare?*" by Martin C. Libicki at the National Defense University.¹¹⁶ The paper considered the utilization of information from a military perspective, and hence the word 'warfare' was associated. Gradually, and in due course, the ambit of information as a resource, and its impact, was understood as being not restricted to military operations and a wider term, 'Information Operations,' came into being, which actually encompassed 'Information Warfare' as elucidated by Libicki. A similar view is expressed by Leigh Armistead in his book titled *Information Operations: Warfare and the Hard Reality of Soft Power* wherein he mentions that the primary doctrinal difference between Information Warfare and Information Operations is that information warfare comprises six elements that are essentially involved in the conduct of combat operations, and that information

¹¹⁵ Jonathan B. Smith, "The Madrid Train Bombing and the Emergence of Al Qaeda 2.0: A Case of Politics, Force Multiplier Effects and Engaging the Far Enemy," Michigan State University, Feb 25, 2005.

¹¹⁶ Martin Libicki, "What is Information Warfare?" Center for Advanced Concepts and Technology Institute for National Strategic Studies, National Defense University, Aug 1995.

operations encompasses information warfare.¹¹⁷ Presently, the majority of the United States doctrines on the subject use the term 'Information Operation,' and the same will be used in this research as well.

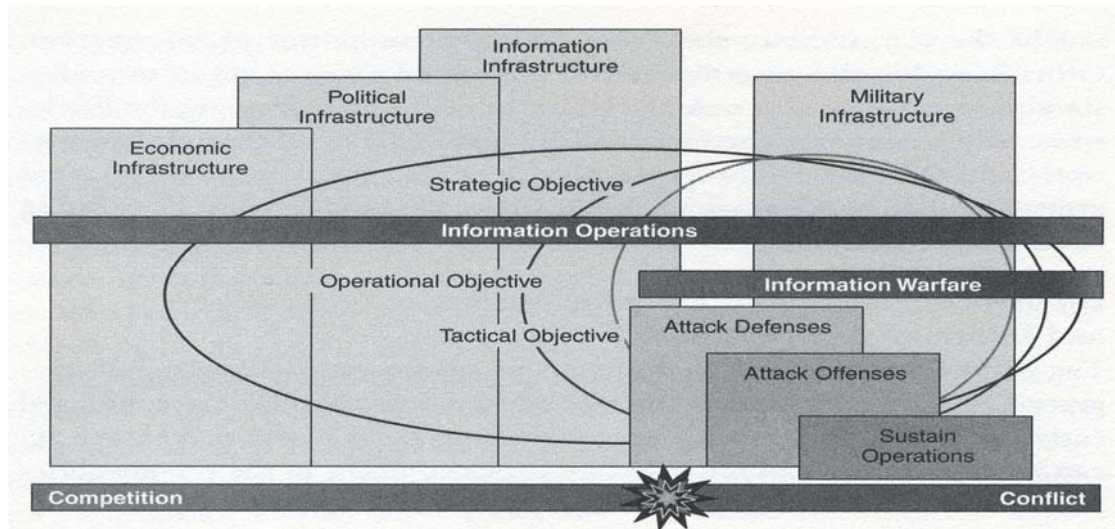


Figure 2. Information Operation Vs Information Warfare Spheres.¹¹⁸

This section commences with the study of the vision and characteristics of information operations as defined by Libicki, identifies the various constituents of information operations as they are known to us today, and thereafter dwells on the phenomenon of a constantly changing '*Information Environment*.' The study of the terms and the concepts of information operations in this section facilitate its association and utilization with regard to terrorism in the following section and chapters.

¹¹⁷ Leigh Armistead, ed., *Information Operations: Warfare and the Hard Reality of Soft Power* (Washington, D.C.: Brassey's, 2004).

¹¹⁸ Leigh Armistead, ed., *Information Operations*, 20.

1. Libicki's Mosaic of Forms¹¹⁹

The concept of information warfare established by Libicki was based on the premise that information as a resource is important to national security, and that the control and dominance of information over a potential adversary will be advantageous. The concept also takes into account the phenomenal growth of information systems in the military, as well as the society on a whole, and an implicit dependence on them. The argument that information warfare does not imply a different form of warfare, but actually needs to be considered as a '*mosaic of forms*,' is an important idea in understanding the dynamics.

Libicki described seven forms of information warfare, the first being Command and Control warfare (C2W), that he termed "anti-head" and "anti-neck." C2W has always played an important role in warfare, but in today's scenario, needs a fresh look due to the lethality and accuracy of weapon systems, an ever increasing battle space, and the increase in the capabilities of smaller groups. The anti-head is related to nodes, and anti-neck to the links in today's context.

The second form Libicki described is Intelligence-Based Warfare (IBW), wherein intelligence was set to be applied directly to operations like targeting and battle damage assessment, and not to overall command and control. In today's context, IBW propels us from an estimate-based to a knowledge-based warfare. There exists a threshold beyond which there is an exponential increase in outcomes with the addition of knowledge, and it reaches a stabilization phase that implies a steady state result even with further increase in knowledge. This form of information warfare is mainly due to escalation in the '*sensory systems*' and the reach they provide.

¹¹⁹ This section uses the above referenced paper by Martin Libicki, to understand how the concept of information operations came into being and professes its importance in today's world. It also allows us to understand its transformation in the form that it is today in the following sections. In addition, a number of points from class discussions during the course "SO3101 – Conflict in the Information Age," conducted by Prof. John Arquilla at the Naval Postgraduate School in Fall 2005, have been included in this part of the research.

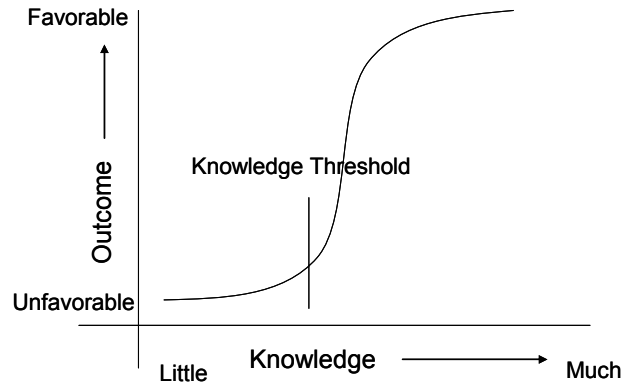


Figure 3. Intelligence Based Warfare – Knowledge vs Outcome.

Electronic warfare (EW) is the third form of information warfare described by Libicki. EW is described as anti-radar, anti-communication, and includes the use of cryptography. In today's context, the impact of EW is diminishing due to emitters becoming more complex and their signals more difficult to decipher. Passive EW is moving more toward traffic and parametric analysis, but active EW, or jamming, is becoming more complicated, and its utilization in a sensor-rich environment will be immense. The potential of EW in today's context is being exploited for jamming missiles, for detonating radio controlled Improvised Explosive Devices (IEDs), and for utilization of controlled Electro Magnetic Pulse. Cryptography is fast becoming the '*code breaker's*' nightmare with new digital techniques, complicated algorithms, and inadequate time-lines for decoding due to computational complexity. A process of re-defining the role of EW is in order to explore new horizons.

Psychological warfare (PSYWAR) is the fourth form, and is divided into four categories: against the national will, against the opposing commanders, against the troops, and cultural conflict. The exploitation of the tenets of PSYWAR, along with the present culture of mass media in the form of the omnipresent television camera and the Internet, has become a potent tool in today's war-fighting scenario. Genghis Khan was a great exponent of PSYWAR as he used every form of violence, deceit, and barbaric act to intimidate his enemies—nations, commanders and people, by utilizing the '*hording technique*,' rumors,

catapulting severed heads of enemy soldiers inside enemy forts, and large scale massacres.¹²⁰ Libicki also dwells on Cultural Warfare, more on the lines of Samuel Huntington's '*Clash of Civilizations*,' and the present day export of the United State's cultural influence in traditional Islamic societies being considered a major cause of the upheavals witnessed in those societies.

Libicki described the fifth form as 'hacker warfare,' which specifically targets computer systems and is confined to attacks on civilian targets, with attacks directed towards military computer systems being in the realm of C2W. Today, hacker warfare is becoming a complex and specialized issue due to robust defensive measures and stringent quality control procedures being enforced for both hardware and software products, but the potential for damage caused by determined hackers, to the information infrastructure of a nation has become immense. The '*condition of proportionality*' comes into play when a hacker attack is visualized on a developed/advanced nation and a developing nation — in terms of \$100 billion in damages to a United States vis-à-vis a \$10 million or less to a third world country. With the explosive growth of the Internet, the medium of a hacker attack has projected terms like '*cyber defense*,' '*cyber deterrence*,' and '*open source intelligence*,' are highlighted in today's context. Further, the barriers of entry into this form of warfare, both from the operational and structural perspectives, remain undefined, whereas for nuclear warfare, we have operational barriers like the Comprehensive Test Ban Treaty and the Non-Proliferation Treaty, and structural barriers in the form of the Strategic Arms Limitation Talks and the Strategic Arms Reduction Treaty. This is due to the incalculable and indiscernible nature of the potency of hacker warfare up till now.

Economic information warfare is described as the sixth form and is divided into two parts: information blockade and information imperialism. This form is based on the premise that information is an important resource. Information blockade restricts the amount of real-time information flow of a nation, and can take the form of physical severance of bulk communication cables, blanking of

¹²⁰ James Chambers, *The Devil's Horsemen*.

satellite and Global Positioning System signals, etc. Information imperialism is more to do with the availability of knowledge-intensive infrastructure, owning information technology and communication lines, and denying the same to other nations, which may result in overall growth retardation.

The last form that Libicki describes is Cyber warfare and includes information terrorism, semantic attacks, simula warfare, and Gibson warfare. Information terrorism relates to unauthorized access and planned theft of the large amount of personal data that is now stored on various computer storage systems around the world. This amount of data is increasing day by day and the potential impact of its being available to unauthorized persons is also on the rise. The recent financial scam in the United Nations-led 'Oil for Food Program' and the implication of Kojo Annan, the son of the former Secretary General of the United Nations, is believed to have been unearthed using information terrorism constructs. Semantic attacks relate to the insertion/modification to data without the knowledge of the user who owns it. It has more to do with the integrity of data.

The collapse of the Abu Nidal group was brought about through covert semantic attacks on the financial transactions of the group. False financial transactions were made to appear in the bank accounts of many of the Abu Nidal operatives that resulted in Abu Nidal believing that his operatives were stealing money from the organization, and this ultimately led to intra-group conflicts and its demise.¹²¹ This example can be categorized under semantic warfare. Simula warfare is a form of virtual or simulated conflict fought between two rival nations without the use of actual combat weaponry; the conflict is simulated and the result is accepted by both parties. This is a complex concept not applicable in the battlefield of today, but could be used in the financial domain to simulate a '*hostile take-over*.' One sided simulation and one sided simulated war games are gaining complexity and being used to assess future battle situations. Gibson warfare consists of virtual duels that are undertaken between adversaries over a

¹²¹ John Arquilla, *The Reagan Imprint* (Chicago: Ivan R. Dee, 2006), 184-185.

medium like the Internet. The examples of the 'Eligible Receiver' exercise held in 1997, wherein a National Security Agency Red Team was tasked to penetrate the Pentagon's internal systems, and the incident of 'Moonlight Maze' that took place between 1998 and beyond, both took the form of an intense battle between Russian hackers, but they could have been between hackers from anywhere around the world using Russian sites, and United States intelligence officials on the Internet.¹²²

The only thing Libicki missed, in his paper, which is an essential constituent of the information warfare domain is deception¹²³. The importance of deception in military campaigns, and its utilization with the manipulation of information to take the form of *void* (null-information), *overload*, and *tailored*, necessitate deception to be earmarked as a form of information operations. A summary of what exactly is information warfare is clarified by a paragraph from a paper written by Dorothy Denning.

*Information warfare is about the exercise of power on the information front. It is about exploiting and controlling the information environment in ways that advance your objectives while thwarting those of your adversaries. It is about promulgating and acquiring desired information, while denying your enemy the same. It is about maintaining secure and reliable communications, while monitoring and disrupting those of your enemy. It is about using information to influence others in ways that serve your mission.*¹²⁴

2. Libicki's Mosaic of Forms in the Context of Global War on Terroism

Information Warfare as revealed by Libicki was more in terms of its applicability between conventional nation states, but in today's scenario, where conflicts are turning more irregular and asymmetric, and the adversary becoming

¹²² Public Broadcasting Service (PBS), "Cyberwar," *Frontline*. Documentary Consortium, program aired on Apr 24, 2003 [on-line], full video available from <http://www.pbs.org/wgbh/pages/frontline/shows/cyberwar/>.

¹²³ Libicki touches on the issue of deception only briefly, and implicitly, in his discussions of how some may learn to conceal themselves from those using offensive IBW.

¹²⁴ Dorothy Denning, "Power Over the Information Front," Conference Paper, Global Flow of Information, Yale Information Society Project (2005) [on-line], available from <http://islandia.law.yale.edu/isp/GlobalFlow/paper/Denning.pdf>.

equally irregular and invisible, there is a need to undertake an assessment of how these concepts play out. In the context of the two adversaries—the Islamic terrorists on one side and the United States and its allies on the other as part of the global war on terror—do Libicki’s ‘*mosaic of forms*’ bear any relevance and do they sufficiently influence operations? Below, in a tabulated form, is an attempt to answer these very questions.

Libicki's – 'Mosaic of Forms'	Utilizati on by U.S and its Allies	Utilization by Islamist Terrorists	Remarks
C2W			
• Anti-Head	+	-	These are the very activities that are directed against the terrorist network's identified nodes and links. Nodes in terms of High Value Targets (individuals, sanctuaries, training centers, media hubs, etc). Links in terms of multi-region and organizational linkages through front forums, utilization of specific websites for communication and control, etc. This has its advantages while targeting a hierarchical organization, but loses its impact due to terrorist being more networked and distributed. From the terrorists' perspectives, the targets are more opportunistic but have their impact.
• Anti-Neck	+	-	
IBW	++	++	This is utilized by U.S. and its allies for targeting specific individuals and specific physical targets; e.g., targeting terrorists using armed Predator UAVs. Terrorist use of open source intelligence for targeting and real-time damage assessment through media images – 'live TV.'
EW			
• Anti-Radar	+	-	Not too much of relevance in the context of operations against the terrorists and actions undertaken by the terrorists.
• Anti-Comn	++	-	This is used by U.S. and allies for targeting terrorists' use of radios and cell phones.

<ul style="list-style-type: none">• Cryptography	-	+	From the perspective of U.S. and allies not much of relevance. But in case of terrorists, cryptography in different forms – from simple codes and ciphers to specialized techniques like steganography, is used to keep their communication imperceptible.
PSYWAR			
<ul style="list-style-type: none">• Anti-Will	+	++	This is the form of information warfare that is being used by terrorists in a big way and have a definite upper hand. The impact on terrorists by PSYWAR conducted by U.S and allies may not be that effective.
<ul style="list-style-type: none">• Anti-Troops	+	++	
<ul style="list-style-type: none">• Anti- - Commander	+	++	
<ul style="list-style-type: none">• Cultural Conflict	-	++	
Hacker Warfare	--	-	Hacker warfare in the classical sense is not of much of relevance from the U.S. viewpoint due to lack of dedicated information systems available with the terrorists. But in case of terrorist this is a potential field that they could exploit in the future.
Economic Information Warfare			
<ul style="list-style-type: none">• Information Blockade	-	-	Information blockade is a good option for U.S. and allies but the only problem is that terrorists use technologies and systems that exist in the environment and hence ‘blocking’ is difficult. Information imperialism is not considered relevant in this context.
<ul style="list-style-type: none">• Information Imperialism	-	-	
Cyber Warfare			
<ul style="list-style-type: none">• Information Terrorism	+	-	This is the form wherein the U.S. and its allies have a considerable advantage – the use of deliberate and critical information, terrorism and semantic attacks are likely to pay considerable dividends. Simula warfare is not relevant in the context of war on terror. Gibson warfare may be used in the future when terrorists actually start penetrating information systems to create disruptive and destructive activities.
<ul style="list-style-type: none">• Semantic Warfare	+	-	
<ul style="list-style-type: none">• Simula Warfare	-	--	
<ul style="list-style-type: none">• Gibson Warfare	+	-	

Table 3. Libicki's – '*Mosaic of Forms*' – An Assessment of Utilization in the Global War on Terror.

3. Elements of Information Operations¹²⁵

Information Operations is a much used term in defense establishments and is applicable to almost everything and to nothing at the same time. This confusion stems from the fact that information operations and its constituents are considered an aggregated whole of the constituents that were hither-to-fore well established and were previously treated as largely independent. The necessity of integration of the constituents is largely derived from the fact that information is all-pervasive and needs to be managed in a cohesive manner.

Joint Publication 3–13 defines *Core*, *Supporting* and *Related* capabilities of information operations. The five core capabilities are Psychological Operations (PSYOP), Military Deception (MILDEC), Operational Security (OPSEC), Electronic Warfare (EW), and Computer Network Operations (CNO). The first three core capabilities have existed as part of military operations and the latter two have now been integrated as a corollary to the present information age. The capabilities supporting information operations include information assurance (IA), physical security, physical attack, counterintelligence (CI), and combat camera (COMCAM), and are seen as directly or indirectly involved in shaping the information environment. The related capabilities constitute public affairs (PA), civil military operations (CMO), and defense support for public diplomacy (DSPD). The core capabilities are applicable at all levels of warfare – tactical, operational and strategic; the supporting capabilities dominate the operational and the tactical levels and the related capabilities dominate the strategic and the operational levels. A brief discussion on the various elements of information operations is highlighted in the following paragraphs, in context to the global war on terrorism.

¹²⁵ United States of America, *Information Operations*, Joint Publication 3-13, Feb 13, 2006. This document is taken as the base for defining the constituents of information operations and a discussion on the subject in this part of the research. All the definitions for the elements of information operations are taken from this document for subsequent discussion.

a. Psychological Operations

PSYOP are defined as *'Planned operations to convey selected information and indicators to foreign audiences to influence their emotions, motives, objective reasoning, and ultimately the behavior of foreign governments, organizations, groups, and individuals. The purpose of PSYOPS is to induce or reinforce foreign attitudes and behavior favorable to the originator's objective.'* The PSYOP objectives are met through the use of radio, print, and other electronic media. The cross-cultural and regional understanding for conducting successful PSYOP against target audiences is an essential element.

b. Military Deception

MILDEC is defined as *'Actions executed to deliberately mislead adversary military decision makers as to friendly military capabilities, intentions, and operations, and thereby causing the adversary to take specific actions (or inactions) that will contribute to the accomplishment of friendly forces mission.'* MILDEC in the information domain is quite different from the traditional or conventional MILDEC that involved the fusing of deception with physical tangibles on the ground; in the information age, MILDEC may achieve success by shaping the information without too much reliance on commensurate actions in the physical domain. This ability to move away from traditional employment of MILDEC will truly allow MILDEC to be integrated in information operation campaigns against terrorist organizations and networks. The importance of understanding the adversary's *'collection systems and sensors,'* to absorb deception, and to correctly assess their attitudes and reactions, is an essential ingredient for a successful MILDEC operation.

c. Operational Security

OPSEC is defined as *'A process of identifying critical information and subsequently analyzing friendly actions attendant to military operations and other activities to: a. identify those actions that can be observed by adversary intelligence systems; b. determine indicators that hostile intelligence systems*

might obtain that could be interpreted or pieced together to derive critical information in time to be useful to adversaries; and c. select and execute measures that eliminate or reduce to an acceptable level the vulnerabilities of friendly actions to adversary exploitation.' The classic OPSEC against a conventional adversary involves a number of related security aspects in terms of physical security, IA programs, computer network defense, and personnel authorization domains. But in the case of a terrorist organization or network as an adversary, OPSEC has little value, since the adversary in this case has a number of avenues for collecting the information required to undertake its actions and the essentially large target space earmarked by the adversary are usually not governed by OPSEC values. In other words, the open source information available to terrorists is not regulated through the parameters of conventional OPSEC benchmarks. This is in the case of both a strategic strike like the 9/11 incident, or a tactical strike in terms of planting improvised explosive devices (IED) to attack a convoy of vehicles in Iraq.

d. *Electronic Warfare*

EW is defined as – *'Any military action involving the use of electromagnetic and directed energy to control the electromagnetic spectrum or to attack the enemy.'* EW includes three major sub-divisions: electronic attack (EA), electronic protection (EP), and electronic warfare support (ES). In terms of terrorists as adversaries, ES is utilized to monitor, identify, locate, and derive actionable intelligence about terrorist networks through the use of electromagnetic sensors, both in the communication and non-communication bands. EA is more in terms of denying the use of the electromagnetic spectrum to terrorists for their communication and control, as well as, in recent times, to nullify the effect of remotely controlled IED. This constituent of information operations is limited to its utilization in the tactical domain in the war on terror.

e. Computer Network Operations

CNOs are described as operations to *attack, deceive, degrade, disrupt, deny, exploit, and defend electronic information and infrastructure*. CNO is divided into three major constituents: computer network attack (CNA), computer network defense (CND), and computer network exploitation (CNE). CNA is comprised of all destructive and disruptive actions; CND involves protection, monitoring, analysis, detection and response, while CNE involves enabling operations and intelligence collection capabilities through the use of networks and information systems. The information in today's information age resides on information systems and flows on the information networks. The ability to regulate information on closed systems is still an achievable action, but regulation of the same on global open systems like the Internet is almost impossible in the present context. In terms of operations against terrorist networks that use the open networks and open channels of communication, CNA is a difficult proposition, but in certain cases can achieve extraordinary results in terms of disruption of terrorist communication linkages, financial infrastructure, and informational hub-centers. CNE also forms an important subset of CNO due to the ability to collect intelligence on terrorist networks through active monitoring of their communication channels, and may provide advance warning to impending actions planned by terrorist organizations. A military information infrastructure is vulnerable to actions by terrorists largely due to the target size involved, as well as a triggering-effect that may be caused by an action and its flow on interconnected global networks; CND, therefore, assumes considerable significance.

f. Information Assurance

IA is defined as *'Measures that protect and defend information and information systems by ensuring their availability, integrity, authentication, confidentiality, and non-repudiation. This includes providing for restoration of*

information systems by incorporating protection, detection, and reaction capabilities.' IA is part of the defensive mechanism necessary for protection of information systems.

g. Physical Security

Physical security is defined as '*That part of security concerned with physical measures designed to safeguard personnel; to prevent unauthorized access to equipment, installations, material, and documents; and to safeguard them against espionage, sabotage, damage, and theft.*' Physical security contributes towards OPSEC and MILDEC. It also forms part of the antiterrorism profile in terms of force protection and consists of defensive measures taken to reduce the vulnerabilities to terrorist attacks.¹²⁶

h. Physical Attack

Physical attack disrupts, damages, or destroys adversary targets through the use of destructive power, and is fundamental to all military operations. It may lead to create or alter adversary perceptions or to facilitate an adversary to use certain exploitable information systems. In terms of a supporting element of information operations, it needs to be integrated with PSYOP to achieve the required influence over a target audience and coordinated to destroy specific command and control nodes of the adversary. This facet allows synchronization between the physical objectives and the informational objectives in a battlefield. In the context of terrorism, physical attacks form part of the counterterrorism response and plays an important role in the destruction of terrorist bases and support infrastructure.

i. Counterintelligence

CI is defined as '*Information gathered and activities conducted to protect against espionage, other intelligence activities, sabotage, or*

¹²⁶ United States of America – Department of Defense, *Antiterrorism*, Joint Publication, JP 3-07.2, Mar 17, 1998.

assassinations conducted by or on behalf of foreign governments or elements thereof, foreign organizations, or foreign persons, or international terrorist activities.' CI is an essential element of antiterrorism and counterterrorism procedures and forms part of both defensive and offensive measures against terrorist organizations and networks.

j. Combat Camera

COMCAM is defined as *'The acquisition and utilization of still and motion imagery in support of combat, information, humanitarian, special force, intelligence, reconnaissance, engineering, legal, public affairs, and other operations involving the Military Services.'* COMCAM is effectively used for the battle of ideas and provides the imagery requirement for PSYOP, MILDEC, PA and CMO. COMCAM products can also be disseminated to regional media organizations to achieve wider publicity and for use in subtle influence operations toward a wider public audience. The dissemination of such products may also be conducted through the Internet so as to exploit the reach of the Internet in news or imagery propagation.

k. Public Affairs

PA is defined as *'Those public information, command information, and community relations activities directed toward both the external and internal publics with interest in the Department of Defense.'* PA forms an important part in the dissemination of truthful information to both internal and external audiences so that a correct perspective of combat operations is projected. A more coordinated and deliberate approach is required to match the actions on the ground with what is projected through PA outlets. It is also utilized to counter terrorist organizations' misinformation and disinformation campaign through publication of accurate information. In many cases there is a good chance of conflicts between PA objectives and the overall information operations objective that may under-scribe the authenticity of the PA outlet or information source.

I. Civil Military Operations

CMOs are defined as *'The activities of a commander that establish, maintain, influence, or exploit relations between military forces, governmental and nongovernmental civilian organizations and authorities, and the civilian populace in a friendly, neutral, or hostile operational area in order to facilitate military operations, to consolidate and achieve operational objectives.'* CMOs are conducted across the range of military operations over all phases - starting from the preparatory phase, through to the stabilization and reconstruction phase. With respect to terrorism, the effectiveness of CMOs is determined by the inability of terrorist organizations to achieve the support base in the general populace of the region.

m. Defense Support to Public Diplomacy

DSPD is defined by the United States military as *'Those activities and measures taken by the Department of Defense components to support and facilitate public diplomacy efforts of the United States Government.'* This activity is conducted at the strategic and operational level and attempts to mesh the foreign policy objectives with much broader goals including specific military information operations objectives. The operations conducted by the military in the field also fall into this category since they can either support the overall public diplomacy effort or cause an adverse impact. The treatment of Iraqi prisoners at Abu Ghraib¹²⁷ and the incident involving the killing of innocent Iraqi civilians at Haditha,¹²⁸ are two examples of how incorrect military actions in the field can cause an adverse impact on the overall public diplomacy effort. Therefore, the vulnerability of military field operations to cause an adverse impact on the information environment needs to be adequately factored and duly understood by military commanders at all levels.

¹²⁷ Seymour M. Hersh, "Torture at Abu Ghraib," *The New Yorker*, May 10, 2004 [on-line], available from http://www.newyorker.com/archive/2004/05/10/040510fa_fact; accessed May 28, 2007.

¹²⁸ Josh White and Sonya Geis, "4 Marines Charged in Haditha Killings," *Washington Post*, Dec 22, 2006 [on-line], available from <http://www.washingtonpost.com/wp-dyn/content/article/2006/12/21/AR2006122100124.html>; accessed May 28, 2007.

4. Constantly Changing Information Environment

JP 3-13 defines the information environment as '*The aggregate of individuals, organizations, and systems that collect, process, disseminate, or act on information.*' The document further defines three dimensions of the information environment: physical, informational and cognitive. The physical dimension is comprised of the command and control systems and supporting organizations that allow prosecution of operations. The informational dimension is where operations are actually executed with information as the main resource. This is the domain that is seen as the information *warehouse* whether stored or flowing on a network. The cognitive dimension includes the decision making process and relates to thoughts, perceptions, and influences.

Information is everywhere and hence the information environment surrounds us whether we are performing combat duties or away from it. Information operations in military terms have not been fully integrated with the erstwhile battle concepts of fire power and maneuver, and it has become more of a reactive measure to mitigate a consequence rather than a deliberate process to shape the information environment.¹²⁹ The major problem is how to visualize the information environment? This problem is further aggravated in the war on terror, due to the fact that the information environment is constantly changing and any minor event in the physical domain has a major impact in the informational and cognitive domains. Two examples that come to the mind are: the pictures of U.S. soldiers being dragged through the streets of Mogadishu that suddenly saw a complete withdrawal of U.S. forces from Somalia, and the attack on the Indian parliament by five terrorists on December 13, 2001 that led to the mobilization of the entire military of about 1.3 million, an unimaginable scale. A Few recent examples include the torture perpetrated by military personnel in the Abu Ghraib prison and the killing of innocent Iraqi civilians by the U.S. marines in Haditha. The information environment at the time of these events became very active in terms of news flowing across the world through television, radio and Internet. It

¹²⁹ Erin A. McDaniel and Julio A. Perez, "How to Visualize and Shape the Information Environment," *Field Artillery*, Nov-Dec 2006 [on-line], available from http://sill-www.army.mil/famag/2006/NOV_DEC_2006/NOV_DEC_06_PAGES_26_33.pdf

included the print media coming out with their analysis, nations and entire polity transfixed by the events, people of the concerned nation states discussing the events in normal conversations, and in due course, a detailed analysis of the events and their consequences appeared in research institutions around the world.

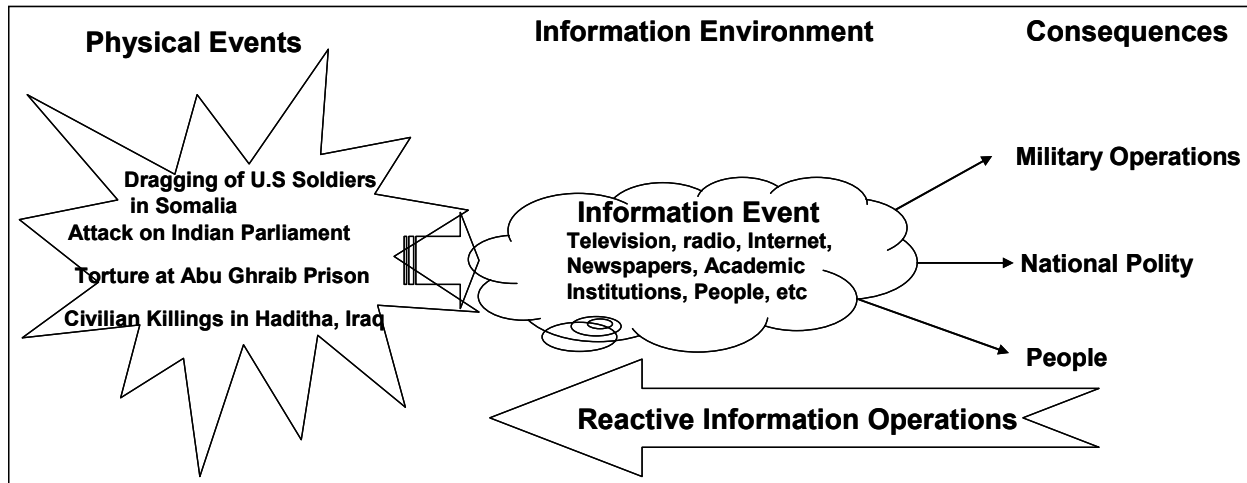


Figure 4. Reactive Information Operations.

Conducting military operations as a consequence of such events, therefore, becomes a major challenge, and shaping the information environment to facilitate military operations, an even greater challenge. Such events being random and their consequences unpredictable, information operations are hence applied only as an aftermath to either change the information environment already created, or to force an information environment to undertake the consequent operations. An example of the latter form is how the information environment was shaped by the United States government prior to undertaking the operations in Iraq, with the issues pertaining to the weapons of mass destruction, and the presence of Al Qaeda in Iraq. It is not enough to plan for such a reactive form of information operations against terrorist organizations and networks that have no boundaries, either geographically or functionally, to the amount of damage they could cause; there is a necessity to take information operations from a supporting domain in the war on terror to a more vigorous and proactive domain. The other point is that directions pertaining to the conduct of

information operations are flowing from the top down and hence the objectives become too far apart, too big, too optimistic, and almost unmanageable. There is a need to distribute information objectives into smaller domains that are manageable in the vast information environment and that are therefore achievable, building on success *one step at a time* may be a more productive and effective strategy.

The information environment has engulfed everything and is omnipresent. It is derived from events happening all over the world and all the time — from the villages in Afghanistan and the streets of Baghdad, in the chat-rooms and blogs on the Internet, in the media centers of TV networks, through the political meetings and debates amongst world leaders, to the operations centers of military planners — the information environment is constantly being shaped. A similar sentiment was expressed by the former Defense Secretary Donald Rumsfeld when he urged the military and the government to launch a nontraditional information campaign against terrorist groups in world media: “*Our enemies have skillfully adapted to fighting wars in today's media age, but for the most part we, our country, our government, has not. ...Our enemies are operating 24/7 across every time zone [and we are not]. That is an unacceptably dangerous deficiency.*”¹³⁰

5. Elements of Information Operations and their Applicability at Levels of Warfare in the Context of Terrorism

JP 3-13 defines information operations as ‘*The integrated employment of the core capabilities of electronic warfare, computer network operations, psychological operations, military deception, and operations security, in concert with specified supporting or related capabilities, to influence, disrupt, corrupt or usurp adversarial human and automated decision making while protecting our own.*’ This definition validates the importance of information and the integration of information operations into execution of military operations at all levels. The

¹³⁰ Ann Scott Tyson, “Rumsfeld Urges Using Media to Fight Terror,” *The Washington Post*, Feb 18, 2006, A07 [on-line], available from <http://www.washingtonpost.com/wp-dyn/content/article/2006/02/17/AR2006021701980.html>.

impact and effectiveness of information is not well understood by monolithic hierarchical militaries that are tailored to meet conventional threats, and trained to meet physical and visible threats. The military leaders have a cultural bias towards a kinetic solution of war¹³¹ and this mindset adds to the deficiencies of the utilization of information operations on equal footing. The seamless flow of information from tactical to strategic levels also leads to a major conflict toward the successful prosecution of information operations. The implications of tactical levels actions in the information domain and their impact in the strategic level, and vice versa, create confusion in the execution of information operations.

The United States JP 3-13 offers a conventional viewpoint of operations in the information domain in the traditional World War II vintage form of warfare, wherein the physical domain is the most important aspect. The document fails miserably to address information operations issues in the context of a global war on terror wherein a traditional nation–state adversary has been replaced by amorphous, invisible and non-state actors, and the informational and cognitive domain has emerged in the forefront. These non-state actors possess an informational advantage due to their being invisible and elusive.¹³²

The inclusion of *related elements* in the overall conduct of information operations by the military, and the inability of military commanders to influence or seek control over those activities, tend to produce conflicting ideas and direction toward the overall objectives. This, then, is easily exploited by terrorist organizations to instill a sense of under-achievement both in the minds of military adversaries, as well as the general public, that may lead to unsympathetic reactions. This phenomenon may be mitigated if the military commanders at all levels can establish the applicability of these diverse information operations elements to their own domain of influence, while participating in the global war on terror. This is, in any case, a difficult proposition since boundaries of the

¹³¹ Dennis Murphy, "Information Operations and Winning the Peace: Wielding the Information Element of Power in the Global War on Terrorism," CSL Issue Paper, Center for Strategic Leadership, U.S. Army War College, Vol. 14-05, Dec 2005.

¹³² Majors' Norman Emery, Jason Werchan and Donald G. Mowles Jr., "Fighting Terrorism and Insurgency: Shaping the Information Environment," *Military Review*, Jan-Feb 2005.

information environment between military commanders at different levels cannot be quantitatively defined in terms of physical elements.

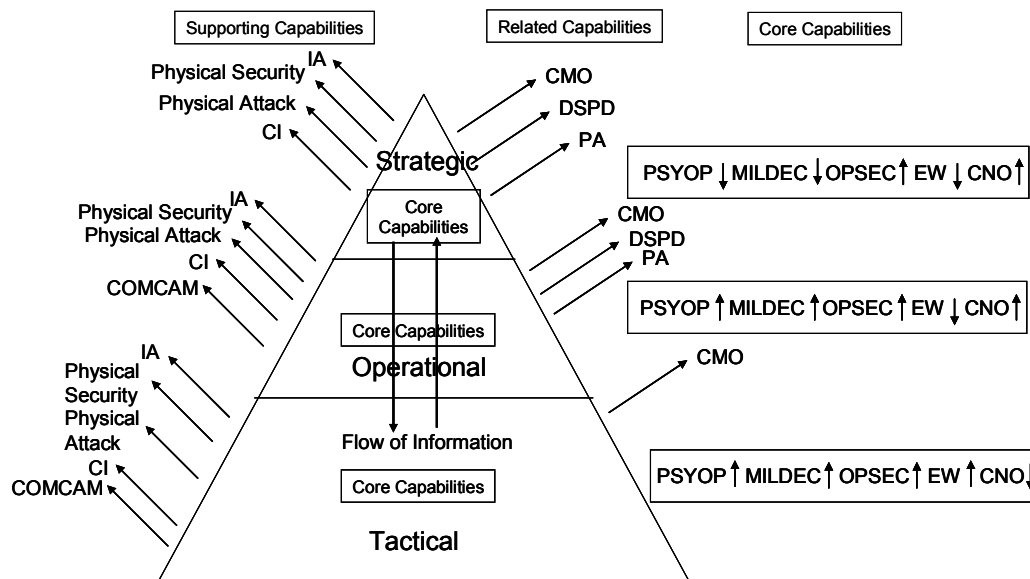


Figure 5. Elements of Information Operations and their Applicability to Levels of Military Operations.

Figure 5 shows a triangle that is divided into three parts depicting the strategic, operational and tactical levels of operations and the flow of information between the levels. The core elements of information operations are present, or find utility, in all three levels albeit with differing expectations. EW is a potent weapon at tactical and operational levels, but returns from it diminish at the strategic level; CNO, on the other hand, has less utility at the tactical level but the returns are magnified at the strategic and operational levels. Similarly, the appropriate levels for utilization are depicted for supporting and related elements of information operations. The objective of undertaking such segregation is the fact that there appears to be a fair amount of confusion with commanders and troops in the actual utility and execution of information operations, since boundaries between many of those elements obliterates in different situations and different levels. Further, the boundaries between the information environments, in most cases, do not exist. The situation gets further complicated when military commanders start pondering the issue of information operations

requirements within their domain and those seen as strategic national level requirements. For this reason, there is a need to somehow limit the domain of information operations more from the functional perspective and in terms of relevance within existing levels of war, so that a more focused effort is visible.

C. TERRORISM AND INFORMATION OPERATIONS

Information has always been an important parameter in conflicts from time immemorial and has always been associated with *power*. The power of information is derived from its utility in knowing more than your adversary, denying knowledge to your adversary, its constructive efficacy in making informed decisions, and its ability to influence your adversary through information alone. These very facets have been ingrained in terrorist organizations worldwide with the intention of achieving their stated objectives. This phenomenon has been magnified, and the abilities of the terrorists enhanced, due to their adaptation both structurally and functionally to exploit the information environment in this information age. The paradigms of information operations in today's world that have been defined, and that are constantly being refined by nations and their militaries throughout the world, have been successfully fused by the terrorists, and are clearly seen in their operational characteristics.

1. Importance of Information in Terrorists' Activities

The terrorists have understood the value of information in the entire spectrum of their activities. These activities range from propagation of their ideology to managing covert finances for their organization, from target profiling to influencing people of different categories around the world, and from instilling a sense of insecurity in their adversaries to winning support amongst people to ensure a steady stream of recruits for their cause. It appears that the terrorists have the initiative in modulating the information environment to their advantage. An example of dominating the information environment is evident from the speech of Osama bin Laden broadcast in 2004: *"All that we have to do is to send two Mujahideen to the farthest point East to raise a piece of cloth on which is*

written Al Qaeda in order to make the generals race there to cause America to suffer human, economic and political losses without their achieving for it anything of note¹³³

Emphasis on information by Al Qaeda is apparent by going through its manual, *Declaration of Jihad Against the Country's Tyrants*.¹³⁴ The document mentions 'information' as one of the requirements of a military organization to assist in 'confrontation and endurance.' Further, the document defines various missions for its followers that have information as a major constituent, such as: gathering information about the enemy, the land, the installations and the neighbors; spreading rumors, and writing statements that instigate people against the enemy; kidnapping enemy personnel, documents, secrets and arms; blasting and destroying the embassies, and attacking vital economic centers. These missions define the importance that an organization like Al Qaeda places on information as an asset and a tool for the conduct of its operations. The Jihad Manual also mentions that it is important to nullify the viewpoint of intellectuals and thinkers who oppose its view toward Jihad and the establishment of an Islamic state. The emphasis on secrecy of information is validated from the paragraph in the book below:

Keeping Secrets and Concealing Information

[This secrecy should be used] even with the closest people, for deceiving the enemies is not easy. Allah says, "Even though their plots were such that as to shake the hills! [Koranic verse]." Allah's messenger – God bless and keep him – says, "Seek Allah's help in doing your affairs in secrecy." It was said in the proverbs, "The hearts of freemen are the tombs of secrets" and "Moslems' secrecy is faithfulness, and talking about it is faithlessness." [Mohammed] - God bless and keep him -used to keep work secrets from the closest people, even from his wife A'isha – may Allah's grace be on her.

¹³³ Osama bin Laden, from the transcript of a video taped message released and aired in the Al Jazeera television network, as reported in the Washington Post on Nov 1, 2004 [on-line], available from <http://www.washingtonpost.com/wp-dyn/articles/A16990-2004Nov1.html>.

¹³⁴ Al Qaeda Manual, "Declaration of Jihad Against the Tyrants" [on-line], available from <http://www.disastercenter.com/terror/>.

The mention of the Colonel John Boyd's OODA (Observe, Orient, Decide and Act) loop is also seen in the Jihad Manual but from a different perspective wherein it mentions that the members of the terrorist organization should have '*necessary qualifications*' that include: *intelligence and insight, ability to observe and analyze* and an *ability to act*; this along with qualifications like *keeping secrets and concealing information* confirms beyond doubt that information and the processes involved in exploiting information have been adequately ingrained in the Al Qaeda operating philosophy. Importance placed on the information environment by Al Qaeda could be gauged from the quote by their second-in-command, Ayman al-Zawahiri: "*I say to you: that we are in a battle, and that more than half of this battle is taking place in the battlefield of the media. And that we are in a media battle in a race for the hearts and minds of our Umma.*"¹³⁵.

The physical environment in which the terrorists operate is carefully crafted with the information environment always in perspective; some cases, where the physical events are seemingly random, also tend to create a positive impact for the terrorists in the information environment. The adaptability of using information as an important resource, and the information environment as the dominant battleground, has created a virtual balance between conventional forces in the world and a comparatively small number of terrorists around the world. This ability of the terrorists to adapt in the information age is predominantly due to opportunities that they have accepted in using modern information technologies. Arquilla and Ronfeldt have also remarked, in their paper, that the information revolution and the enabling information technologies, along with the adaptability of terrorist organizations to mesh into a networked force, are themselves among the primary enabling mechanisms for the emergence and subsequent growth of such non-state actors, with a considerable impact on global security.¹³⁶ The importance of information is also felt by nation states

¹³⁵ Ayman Al Zawahiri, "Letter from al-Zawahiri to al-Zarqawi," Jul 9, 2005 [on-line], available from http://www.fas.org/irp/news/2005/10/letter_in_english.pdf.

¹³⁶ David Ronfeldt and John Arquilla, "What Next for Networks and Netwars," in *Networks and Netwars: The Future of Terror, Crime and Militancy*, John Arquilla and David Ronfeldt, eds (Santa Monica: RAND, 2001) [on-line], available from http://www.rand.org/pubs/monograph_reports/MR1382/

around the world and is clearly evident from the thoughts expressed by former National Security Advisor Condoleezza Rice, before the United States embarked on the Global War on Terror: *“There will be, undoubtedly, some things that our military forces and the military forces of others can do. But this is also a war of will and mind, it is a war in which information may be the most important asset that we have. And so we’re asking a lot of countries to help us with information.”*¹³⁷ There is a need to fully exploit the information domain in a proactive manner rather than through an information protective syndrome to achieve success in the war on terror.

D. SUMMARY

This chapter gave an overview of terrorism and dwelled on its root causes. The analysis of the root causes, in terms of their grouping and relevancy, helps us in identifying priority areas in the war of ideas and for shaping the information environment. The ‘war of ideas,’ that is such a dominant part of the Global War on Terror, is examined from the perspective of both the Islamist terrorist and the United States and its allies. This chapter also introduced the basics of information operations as originated by Libicki and their contextual relevance to the Global War on Terrorism. The chapter contained various elements of information operations as promulgated through the United States Joint Doctrine on the subject, and analyzed their applicability in different levels of military operations. The chapter further deliberated on the use of information operations by terrorist organizations and concludes with the premise that terrorist organizations need to conduct information operations for their growth as well as survival in today’s information age.

¹³⁷ Condoleezza Rice, from the transcript of the press briefing of Sep 19, 2001 in the *Washington Post* [on-line], available from http://www.washingtonpost.com/wp-srv/nation/specials/attacked/transcripts/ricetext_091901.html.

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III. AL QAEDA AND INFORMATION OPERATIONS: COEXISTENCE AND ADAPTATION

*.... It is important to hit the economy (of the United States), which is the base of its military power If the economy is hit they will become preoccupied.*¹³⁸

— Osama bin Laden

*... we realized from our defense and fighting against the American enemy that, in combat, they mainly depend on psychological warfare.*¹³⁹

— Osama bin Laden

*... So we are continuing this policy of bleeding America to the point of bankruptcy. Allah willing and nothing is too great for Allah. Al Qaeda spent \$500,000 on the event[9/11], while America, in the incident and the aftermath, lost according to the lowest estimate – more that \$500 billion. Meaning that every dollar of Al Qaeda defeated a million dollars by the permission of Allah*¹⁴⁰

— Osama bin Laden

The above quotes reflect the tone of a terrorist who is conscious of the Information Revolution. Osama bin Laden and Al Qaeda have skillfully adapted to the new paradigms of Information Operations that are still being unraveled by modern states and societies. The ability to focus on modern technologies as a means to pursue its ideology, has made Al Qaeda into a *global syndrome* that has generated sufficient appeal in the Muslim community especially in many of the Middle East states. It is also influencing Muslims all over the developed world through sermons on the Internet given out by radical Muslim clerical preachers holding allegiance to Al Qaeda, and a '*mass advertisement campaign*' that is timed to perfection with corresponding physical events. The globalization of

¹³⁸ Statement of Osama Bin Laden, Dec 27, 2001 [on-line], available from <http://www.doublestandards.org/alqa.html#alqa5>.

¹³⁹ Audio message purported to be by al-Qaeda leader Osama Bin Laden, broadcast on Arab television station Al Jazeera on Feb 11, 2003 [on-line], available from <http://www.doublestandards.org/alqa.html#alqa7>.

¹⁴⁰ English transcript of Osama bin Laden's speech in a videotape sent to television station Al Jazeera on Oct 30, 2004 [on-line], available from <http://www.doublestandards.org/alqa.html#alqa8>.

terrorism, for which Al Qaeda may purely be blamed, has been possible due to the global reach of information, its proficient use by Al Qaeda, and its near real-time assimilation by the public at large. The importance of information as an essential tool to achieve its strategic objectives, and the visibility of various forms of information operations in planning, training, philosophy, and the conduct of its operations has noticeably defined the interest of Al Qaeda to absorb the Information Age to its advantage. The ever-increasing reliance on information in all domains, by all the countries in the world, presents a unique opportunity for Al Qaeda to specifically target and exploit this resource to its advantage.

This chapter analyzes the evolution of Al Qaeda into an organization that has adopted the paradigms of the Information Age and through which it has turned into a force to be reckoned with on the world stage. The evolution of Al Qaeda is also closely correlated with the growing influence of their leader, Osama Bin Laden. This organization professes the establishment of a rule that dates back centuries, which is seen as an aberration in modern societies, but is in no way averse to the utilization of the modern day technologies that are so very important for it to sustain and grow. The '*means to an end*,' even though contradictory, has been absorbed by the organization in all its operations. Information operations is a concept that was developed by the Western world for modern militaries, but is being exploited by Al Qaeda to 'turn the tables' and fight the war on terror with no comparative physical standing. This chapter, therefore, undertakes answering questions like: How has Al Qaeda evolved into such a threat? How is it exploiting the domain of information operations and modulating the information environment? The chapter also provides a comparative assessment of changes in Al Qaeda's methodology for exploiting Information Age paradigms after 9/11.

A. AL QAEDA – EVOLUTION INTO AN INFORMATION AGE THREAT

Terrorism blended with *Jihad* is a potent mix that has been propagated by Al Qaeda and is rightly regarded as a major security concern around the world. Islamist terrorism in general, and Al Qaeda in particular, has grown into a trans-

national network with footprints all over the globe and has been a classic case of a 'blow-back' that has hit back at the United States and its allies with a vengeance such as has never been seen before.¹⁴¹

*You talk about al-Qaeda. Have you forgotten who has bred al-Qaeda?...It's the illegitimate child of America and Israel, but you name it Islam. This savagery is not Islam. It is coming from inside of you and it is now punching you.*¹⁴²

— Ayatollah Mohammed Emami-Kashani, prominent Iranian cleric

Al Qaeda has definitely taken substantial losses since 9/11 but is seen as 'on the march' at present and has regrouped and reorganized to emerge as a source of inspiration and emulation to many of the Islamist fundamentalist movements around the world.¹⁴³

¹⁴¹ John Arquilla, *The Reagan Imprint*, 43. Arquilla argues that the tacit support that was part of the 'Reagan Doctrine'—of helping others to fight for their freedom, and funding of the Mujahideens in Afghanistan during the Cold War, may have been the impetus responsible for propelling a world-wide Islamist terrorism movement to germinate and gain center stage, as well as the inability to take decisive action almost two decades back to *nip it in the bud*. Also see the article, "Terrorism: Theirs and Ours," by Eqbal Ahmad as part of his presentation at the University of Colorado in 1998. It talks about the whole-hearted assistance provided by the United States to the Afghan Mujahideens in the Reagan Era. The article is available at <http://www.sangam.org/ANALYSIS/Ahmad.htm>. The photograph of Former President Ronald Reagan hosting Afghan Mujahideen leaders at the White House in 1982 is available from <http://www.reagan.utexas.edu/archives/photographs/large/c12820-32.jpg>. There are a number of interesting articles on the Internet and a few books that provides such a view-point: "Al Qaeda: A CIA Protégé," by Franklin Freeman (<http://www.geocities.com/libertystrikesback/afghan.html>), "How the CIA Created Osama Bin Laden," by Norm Dixon (<http://www.greenleft.org.au/2001/465/25199>), "Who is Osama Bin Laden?" by Michel Chossudovsky (<http://globalresearch.ca/articles/CHO109C.html>), *Ghost Wars: The Secret History of the CIA, Afghanistan, and Bin Laden, From the Soviet Invasion to September 10, 2001*, by Steve Coll (New York, 2004), "How Jimmy Carter and I Started the Mujahideen," a report of interview with former National Security Advisor Zbigniew Brzezinski to *Le Nouvel Observateur*, Jan 15-21, 1998 (<http://www.counterpunch.org/brzezinski.html>). It is also mentioned that there is actually a dearth of research on this aspect by many of the eminent Islamist terrorism experts around the world, especially from the Western countries, and in many instances it appears to be an accepted inference or has been conveniently *brushed under the carpet*.

¹⁴² BBC News, "UK invited attacks — Iran Cleric," Ayatollah Mohammed Emami-Kashani while condemning the London blasts on Jul 7, 2005 [on-line], available from http://news.bbc.co.uk/2/hi/middle_east/4665133.stm

¹⁴³ Bruce Hoffman, "What Went Wrong," *Washington Post*, Aug 27, 2006, BW 06 [on-line], available from http://www.washingtonpost.com/wp-dyn/content/article/2006/08/24/AR2006082401147_pf.html – while reviewing two books *The Looming Tower—Al-Qaeda and the Road to 9/11* by Lawrence Wright and *Without Precedent—The Inside Story of the 9/11 Commission* by Thomas H. Kean and Lee H. Hamilton.

1. Tracing the Evolution

Al Qaeda evolved not as the brain-child of its leader Osama Bin Laden, but as an organization that had its foundations derived from the philosophy of various radical Islamist scholars, battle-hardened cadres from the Soviet-Mujahideen era in Afghanistan, and through the support of hundreds of Muslim people who believed in an organization that would fight for the rights of Muslims. The early days of the evolution of terror began in 1984 in Afghanistan and Pakistan when Osama Bin Laden provided construction machinery and established hospitals and guest houses in Peshawar and adjoining areas with the intention of providing logistics and infrastructure support to the Mujahideens fighting the Soviets.¹⁴⁴ Bin Laden also funded the establishment of training camps in Afghanistan to train Afghans and non-Afghan volunteers. The first camp was established at Jaji in Afghanistan for the main purpose of providing military training with teachings in Islamic theology and history.¹⁴⁵ This is the time when Osama Bin Laden came across his mentor and a radical Islamist scholar, Adbullah Azzam who established the Maktab al-Khidmat (MAK) or Services Office in Peshawar, Pakistan, that was a place where radical Islamists congregated from all over the world to join the Islamist movement being evolved to fight the Soviets. This had the implicit backing of the Pakistan government and active support from the United States of America, since at that time the *'bigger*

¹⁴⁴ Peter L. Bergen, *Holy War, Inc: Inside the Secret World of Osama Bin Laden* (New York: The Free Press, 2001), 51.

¹⁴⁵ Anonymous, *Through Our Enemies' Eyes: Osama Bin Laden, Radical Islam, and the Future of America* (Washington, D.C.: Brassey's, 2002), 98.

evil,' in the eyes of Western world, was communism.¹⁴⁶ MAK became the central office of a network that spanned many countries, including the United States, that was responsible for propaganda, media-related activities, fundraising, and the recruitment of new members.¹⁴⁷ Over time, MAK and the camps that it established served Arab volunteers only, since Osama Bin Laden was of the opinion that, conceptually, the idea of organizing separate Arab and Afghan militant groups would bear better results.¹⁴⁸

Al Qaeda derived its ideology from Azzam's teachings that had Islam as the only acceptable way of life as the central theme, and that the glory of the Muslim world could be achieved once again when all individual Muslims focused on *Jihad* as an obligation and as the sacred duty of a Muslim. Azzam talked about a model, a philosophy, or an ideology and not a structured organization.¹⁴⁹ Osama Bin Laden, during that time of evolution, was more of a logistics operator

¹⁴⁶ Peter Bergen in his book *Holy War, Inc.* devotes a complete chapter titled "Blowback: The CIA and the Afghan War," wherein he argues that the United States did make some tactical errors during the war while arming the Afghans, that there was an active modulation of the scenario undertaken by the United States using its *money power*, and that Pakistan's Inter Services Intelligence (ISI) was given a free hand to prosecute the entire operation. The ISI became the all-powerful organization funding Islamist militants from all over the world that included mostly the militants who had deep anti-Western sentiments. This in many ways could be considered the birth of the global Islamist terrorist threat that we are facing today. Also see Kenneth Katzman, "Al Qaeda: Profile and Threat Assessment," CRS Report for Congress, Aug 17, 2005—wherein he illustrates the support of the United States for the Mujahideens to fight the holy war against the Soviets. Also see Robin Cook, "The Struggle Against Terrorism Cannot be Won by Military Means," *The Guardian*, Jul 8, 2005, wherein he states: "*Bin Laden was, though, a product of a monumental miscalculation by western security agencies. Throughout the 80s he was armed by the CIA and funded by the Saudis to wage jihad against the Russian occupation of Afghanistan. Al-Qaida, literally 'the database,' was originally the computer file of the thousands of mujahideen who were recruited and trained with help from the CIA to defeat the Russians. Inexplicably, and with disastrous consequences, it never appears to have occurred to Washington that once Russia was out of the way, Bin Laden's organization would turn its attention to the West.*" [On-line], available from <http://www.guardian.co.uk/terrorism/story/0,12780,1523838,00.html>. Ahmed Rashid, *Taliban: Militant Islam, Oil and Fundamentalism in Central Asia*, (Waterville, Maine: Thorndike Press, 2002). The author has described how millions of dollars flowed from the United States intelligence agencies and other Islamic states for the Afghan Mujahideens that helped create the problem of terrorism in the areas of Afghanistan and Pakistan that we are facing today.

¹⁴⁷ Rohan Gunaratna, *Inside Al Qaeda* (New York: Columbia University Press, 2002), 4.

¹⁴⁸ Anonymous, *Through Our Enemies' Eyes*, 101.

¹⁴⁹ Jason Burke, *Al-Qaeda: Casting a Shadow of Terror* (New York: I.B. Tauris, 2003), 6. Abdullah Azzam is the author of two papers: "Join the Caravan" and "Defense of Muslim Land," the teachings therein are quite similar to the ethos and ideology that are seen in Al Qaeda. The English translation of the papers are available from <http://www.islamistwatch.org/texts/azzam/azzam.html>

and a financier responsible for setting up logistics bases and traveling around the Arab world to seek donations for sustaining the Jihad in Afghanistan. This is the very reason why Al Qaeda always derived its strength and support from like-minded people in different countries and regions around the world, and consequently, was able to establish itself as the *vanguard of global fundamentalist Islamist revolution* and why it always nurtured a macro world view from its inception to what it is at present. The key foundation and a rallying theme at that time was the “defense of Islam,” which even now continues to be effective. By the end of the Soviet occupation in Afghanistan and their subsequent retreat, the various camps established to support the Afghan mujahideens and the Arab volunteers began to send war veterans back to their native countries. This in turn started creating problems within their respective societies and countries, and hence the camps came under covert scrutiny from various Arab governments. This led to the formation of Al Qaeda in 1989, which was modeled as more secretive and detached, with a separate infrastructure and a more hardened Islamist ideology.¹⁵⁰

Al Qaeda remains a kind of virtual organization that denies its own existence in order to remain in the shadows and is thereby able to hide its true intentions, motives, and future courses of actions.¹⁵¹ Azzam further laid out guidelines for Al Qaeda operatives that demanded acceptance of the toughest tests — abstinence and frugality, unflinching belief in ideology, determination and insistence, patience and prayer, and loyalty and devotion — as the binding virtues.¹⁵² The gains to Al Qaeda and Islamist terrorism until 1989 were immense, from combat experience, self-confidence, increased religious faith, ambitions for a borderless Islamic world, leadership skills, hatred toward the

¹⁵⁰ Peter Bergen, *Holy War, Inc.*, 59.

¹⁵¹ Rohan Gunaratna, *Inside Al Qaeda*, 3. He further depicts Al Qaeda as an enigma, a shadowy body that many Islamist terrorists aspired to join, and also mentions that Al Qaeda rarely assumed responsibility for a terror act and that Osama Bin Laden himself had never used the term ‘Al Qaeda’ until the 9/11. Different authors have a different dateline associated with the formation of Al Qaeda as an organization but most of them believe that it was during 1988 and 1989 when the birth of Al Qaeda officially took place.

¹⁵² Rohan Gunaratna, *Inside Al Qaeda*.

Western countries, especially the United States, and above all, the networking necessary to create a truly international radical Islamic movement.¹⁵³ The country hopping of Osama Bin Laden after 1989 from Afghanistan-Pakistan to Saudi Arabia and then to Sudan, and finally back to Afghanistan, further strengthened the global outlook of the organization and thus began its evolution into the 'network of networks.'

In the beginning of 1989, Osama Bin Laden moved to Saudi Arabia for a period of two years. These two years were tumultuous due to the strained relationship between Osama Bin Laden and the Saudi royal family, especially on issues pertaining to the support of the Saudis by the United States-led offensive against Iraq in 1991, and the stationing of thousands of United States troops in the *land of the two holy places*. These two years may be regarded as a consolidation phase both for Al Qaeda and their leader; the stature and the influence of Osama Bin Laden grew due to his exploits in Afghanistan, his open opposition to the ruling elite in Saudi Arabia, his inflammatory speeches in several mosques and religious academic institutions, and his opposition to the presence of United States troops in Saudi Arabia.¹⁵⁴ This was also the period wherein Al Qaeda established its tentacles through settlement of the fundamentalist war veterans of Afghanistan in other societies in different parts of the world.

The years 1991 to 1996 were the years when Osama Bin Laden found refuge in Sudan, which was ruled by Hassan al-Turabi, the leader of the country's National Islamic Front, and who aimed to create a pure Islamic state in Sudan. Osama Bin Laden's exile to Sudan could be defined as the turning point for the establishment of Al Qaeda on a global front and for moving away from the initial objectives that focused more on Saudi Arabia and the Arabian Peninsula in general, toward, a more global venture.¹⁵⁵ The relationship between Osama Bin

¹⁵³ Anonymous, *Through Our Enemies' Eyes*, 105-108.

¹⁵⁴ See Jason Burke, *Al Qaeda*, Peter Bergen *Holy War, Inc.*, Anonymous *Through Our Enemies' Eyes*, Rohan Gunaratna, *Inside Al Qaeda*.

¹⁵⁵ Jane Corbin, *Al Qaeda: In Search of the Terror Network that Threatens the World* (New York: Thunder's Mouth Press / Nation Books, 2003).

Laden and the Sudanese regime was totally symbiotic, with Bin Laden helping to create the country's infrastructure by investing his money, and the Sudanese government giving a free hand to him for establishing his training camps.¹⁵⁶ This was also a time when radical Islamist ideology saw its roots becoming entrenched in Africa and began the export of Al Qaeda fighters to various conflicts that were going on at that time in Africa. Al Qaeda actively supported the Somali militia against the United States-led United Nations peacekeeping force and was involved in the training of militia, the downing of the United States helicopter, and dragging and killing United States soldiers in the streets of Mogadishu.¹⁵⁷

This was the period when the Al Qaeda network grew from Africa to Bosnia to the Philippines to Yemen and other countries; emissaries and soldiers of Osama Bin Laden were sent to different corners to garner support, to profess the ideology, and also to actively participate in conflicts going on in those countries. The important event that happened during this time was the setting up of the Advice and Reformation Committee (ARC) under Khaled al-Fawwaz in London. This became the *de facto* and legitimate mouth-piece of Al Qaeda. ARC directed its voice mainly towards Saudi Arabia in order to project the regime's inadequacy towards Islam and its unacceptable bias toward the United States and Western values.¹⁵⁸ Even though Osama Bin Laden and Al Qaeda were based in Sudan, the camps in Pakistan and Afghanistan continued to operate. Once again, the time in Sudan was spent in consolidation of the Al Qaeda network, making contacts with more terrorists groups, and spreading its ideology around the world. Al Qaeda and Bin Laden grew in stature as global financiers of terrorist activities and as motivational factors. Finally, in mid-1996, Osama Bin Laden moved from Sudan to Afghanistan mainly due to the tremendous pressure exercised by the United States and Saudi Arabia on the Sudanese regime and a failed assassination attempt on Bin Laden, but also because Afghanistan was a

¹⁵⁶ Peter Bergen, *Holy War, Inc.*, 76-82.

¹⁵⁷ Anonymous, *Through Our Enemies' Eyes*, 134-137.

¹⁵⁸ Peter Bergen, *Holy War, Inc.*, 88.

known territory from where he could again re-establish himself in no time and provide a more secure geographical base for Al Qaeda.¹⁵⁹

From Sudan to the mountains of Hindu Kush the journey of Osama Bin Laden and his band of followers in the middle of 1996 is regarded as a *home-coming*, and his actual whereabouts have been hidden from the world ever since. Bin Laden was accepted by the Taliban with full support due to his stature and exploits during his earlier times in Afghanistan, the economic wealth that accompanies Bin Laden, an unflinching support for Mullah Omar—the supreme leader of the Taliban—and a growing optimism in Afghanistan that he could secure the integration of diverse factions in the war-torn country. This was when Osama Bin Laden and his network came out with the declaration of *Jihad on the Americans Occupying the Country of the Two Sacred Places* on August 23, 1996. The declaration created a formal alliance of like-minded terrorist organizations with the aim of fighting against the United States and its allies in the form of the *World Islamic Front for Jihad against the Jews and the Crusaders* on February 22, 1998. For the first time, they used the media proactively to establish themselves as the pre-eminent terrorist network in the world, and made their global intentions clear.

2. Al Qaeda Organizational Structure – Always Focused toward a Global Center-Stage

The name ‘Al Qaeda’ was never used by Osama Bin Laden for his organization or network from the time of its existence to the year 2001. Even after the attack on the United States embassies in Tanzania and Kenya in 1998, President Clinton acknowledged the fact that Osama Bin Laden was involved in the incidents, but he was treated more as a financier and ideologue; Al Qaeda as an organization was never highlighted. A similar view was expressed by George Tenet, the former director of the CIA, during his testimony to the Senate Intelligence Committee in February 2001.¹⁶⁰ Osama Bin Laden himself used the

¹⁵⁹ Anonymous, *Through Our Enemies' Eyes*, 143-147.

¹⁶⁰ Jane Corbin, *Al Qaeda*, 83.

term Al Qaeda and described how the name was coined in an interview with an Al Jazeera correspondent in October 2001.¹⁶¹ The meaning of the term Al Qaeda as 'the base' or 'foundation' aptly describes it as the vanguard of global fundamentalist Islamic movement. As Bruce Hoffman points out in his paper almost four years back, there are various perceptions on what Al Qaeda is: a monolithic, international terrorist organization with a well-defined command and control structure, a broader, more amorphous transnational network, an army or an ideology, an international criminal enterprise, or a kind of franchise organization.¹⁶² Several analysts have also pointed out that Al Qaeda has adapted from a somewhat hierarchical organization from pre 9/11 days to a more networked organization post 9/11. John Arquilla is of the opinion that Al Qaeda was a hub-oriented network before 9/11 and shifted to something much more dispersed and distributed after OEF.¹⁶³ In my view, Al Qaeda was created as a globally networked organization, and as all networks have a hierarchical structure, so does Al Qaeda.¹⁶⁴ The emphasis on small cells, sufficiently independent and capable of executing catastrophic attacks, has always been the hallmark of Al Qaeda. The networked structure implies that the nodes and the links between the nodes are vulnerable entities as is Al Qaeda in that regard. What needs to be analyzed by counter-terrorism experts is what are the important nodes and links that need to be targeted in order to have a more definite impact. Focus on the organizational structure limits us toward taking more physical steps and achieving our objectives, but what also needs to be co-opted are the informational targets that have an impact on the physical aspects

¹⁶¹ Transcript of the interview by Al Jazeera correspondent Tayseer Alouni and Osama Bin Laden that took place in Oct 2001 [on-line], available from <http://archives.cnn.com/2002/WORLD/asiapcf/south/02/05/binladen.transcript/index.html>

¹⁶² Bruce Hoffman, "Al Qaeda, Trends in Terrorism and Future Potentialities: An Assessment," RAND, 2003.

¹⁶³ Discussion with Prof. John Arquilla at Naval Postgraduate School, May 2007.

¹⁶⁴ See also Kenneth Katzman's "Al Qaeda: Profile and Threat Assessment," wherein he writes: *'Al Qaeda has always been more a coalition of different groups than a unified structure, many argue, and it has been this diversity that gives Al Qaeda global reach — the ability to act in many different places and to pose a multiplicity of hard-to-predict threats.'* Also see Daniel L. Byman, "Al Qaeda as an Adversary: Do We Understand Our Enemy?" *World Politics*, 56, Oct 2003, 139-163; wherein he writes: *"..Al Qaeda is simultaneously a small core group and a broader network linking various Islamist groups and causes."*

that tend to promote the informational environment that we desire. Further, due to the transnational bindings in Al Qaeda, many regional Islamist terrorist organizations have remodeled their approach to include the broader objectives of Al Qaeda. What this has led to is the global connectivity that Al Qaeda always desired and it has thus established itself as the overall umbrella organization. The implications of such an understanding between Islamist terrorist organizations implies that a more formal global intelligence sharing mechanism is in order to counter the threat, and that each country needs to identify its domain of influence for exclusively targeting Islamist terrorist organizations within that domain, and with a global intelligence network as the supporting infrastructure.

The present organizational structure of Al Qaeda is under a lot of debate, but it is believed that prior to 9/11 the Al Qaeda core structure had a Consultative Committee, or the *Shura* Council, consisting of senior Al Qaeda members; a Military or Operations Committee, for training operatives, acquiring weapons, and planning attacks; a Business Committee to oversee front-end organizations, donation collections, and fund-raising; a Religious Committee, to hold discussions on various issues pertaining to religion and the issuance of *fatwas*; a Law Committee to review Islamic law and decide if particular courses of action conform to the law; and a Media Committee to handle all the propaganda activity and the release of various speeches by the senior leadership from time to time. The overall organization was headed by Osama Bin Laden as the leader and Ayman Al Zawahri as his second-in-command.¹⁶⁵ The directions emerging from these committees generally have global ramifications. The existence of such a formalized structure may not be a valid assumption at this stage, but it is necessary to understand that Al Qaeda is a methodical organization, and as time goes by in the War on Terror, some variant of such a structure, with a different and newer breed of leaders is likely to emerge again. The new leadership of Al Qaeda may not be as charismatic as the ones at present, but may be as

¹⁶⁵ For more on the organization structure of Al Qaeda refer to Alexander and Swetnam *Usama bin Laden's al-Qaida: Profile of a Terrorist Network* (New York: Ardsley, Transnational Publishers, 2001), Rohan Gunaratna *Inside Al Qaeda*. See also Al Qaeda on Wikipedia - <http://en.wikipedia.org/wiki/Al-Qaeda>

dangerous. Nevertheless, personalities are important in this war and the organization is bound to take a hit once the present leadership is eliminated,¹⁶⁶ When this is achieved, the information environment needs to be duly modulated to actually achieve the desired result of weakening the organization and not make it into an event that will propel Islamist terrorism into a new dimension.

Al Qaeda, from its inception, always had eyes on the world center stage and the success achieved by the band of mujahideens in Afghanistan provided the necessary boost to Al Qaeda leadership to project their intentions and objectives on a global scale. It is amply clear that there were two major objectives that Al Qaeda laid out for itself:

- The establishment of a global Islamic *caliphate* or the global Muslim *Umma*, which is highlighted in all the addresses by Osama Bin Laden: the entire Muslim community is addressed as a common entity and as a global community.¹⁶⁷
- Taking on the United States of America, the only superpower, and its allies, as enemies of Islam and the Muslim community worldwide due to reasons that include the unacceptable presence of United States troops in Saudi Arabia and the Middle East, its unflinching support of Israel, its support of a number of corrupt regimes in the Middle East, and the death of thousands of Muslim civilians due to wars undertaken by the United States.¹⁶⁸ The concept of an organization taking on a superpower has a much greater appeal in the Muslim world and generates a binding influence.

¹⁶⁶ Daniel L. Byman, "Al Qaeda as an Adversary: Do We Understand Our Enemy?" The author, while reviewing five books related to Al Qaeda, provides a summary of the importance of Bin Laden and correctly points out the fact that elimination of Bin Laden is necessary both in the physical as well as in the virtual domain to achieve the demise of Al Qaeda.

¹⁶⁷ This issue is highlighted in most of the addresses by Osama Bin Laden from 1996 to the present day.

¹⁶⁸ Daniel L. Byman, "Al Qaeda as an Adversary."

B. AL QAEDA AND INFORMATION OPERATIONS

1. Organizational Adaptation in the Information Age

The disruption and damage to Al Qaeda that has occurred post 9/11 due to the ongoing Global War on Terror has led to a significant reorganization that is evident in the Al Qaeda hierarchy and its global network. There is a need to understand that carrying out *high-profile* attacks is not the only purpose of Al Qaeda, and that the organization is perceived as some sort of loose network that synergizes its global Islamic fundamentalist perspective through influencing diverse and disparate terrorist organizations around the world. Benjamin and Simon have termed Al Qaeda the “quartermaster of Jihad”¹⁶⁹ that provides moral, financial, and material support to Islamic terrorist organizations worldwide. Others, like Paul Pillar, have equated Al Qaeda to the Internet due to its transnational reach, its global connectivity, and its control and coordination elements as invisible.¹⁷⁰ Analysts like Arquilla and Ronfeldt feel that the Al Qaeda network has moved toward shaping into a multi-hub “spider’s web” design¹⁷¹ with dispersed, isolated, and small cells capable of planning independent missions to achieve relatively small-scale but significant events, and awaiting subtle directions from the top hierarchy for any major initiative. The dispersed nature of these small units thus compels them to adopt and embrace basic network forms and modern information warfare paradigms with an aim to profess their ideology, bring about efficiency in their operations, and remain somewhat imperceptible.

It is fairly clear that organizational adaptation is necessary to survive in this Information Age and Al Qaeda clearly demonstrates that quality. From an organization that was constantly in search of a physical base, it has turned into a

¹⁶⁹ Daniel Benjamin and Steven Simon, *The Age of Sacred Terror* (New York: Random House, 2002), 113.

¹⁷⁰ Paul Pillar, *Terrorism and U.S. Foreign Policy* (Washington D.C.: Brookings Institution Press, 2001), 55.

¹⁷¹ John Arquilla and David Ronfeldt, *Afterword (September 2001): The Sharpening Fight for the Future*, in *Networks and Netwars: The Future of Terror, Crime and Militancy*, ed John Arquilla and David Ronfeldt (Santa Monica: RAND, 2001), 364-365.

'base-less' organization that has increasingly become harder to define in the physical domain and is predominantly using the informational domain to profess its ideology and influence the worldwide Islamic fundamentalist movement. As is seen today, almost all the Islamic fundamentalist organizations in different parts of the world have their specific agendas and priorities but show some form of linkage to Al Qaeda, and this linkage is seen more and more at the ideological level. Al Qaeda has been able to build this network through an informational campaign that recognizes the individual causes of these diverse groups and provides logistical support in terms of training, finances, and the vision to create an Islamic *umma*.

2. Al Qaeda's Forte—Psychological Operations, Propaganda and Combat Camera

Al Qaeda has been using psychological operations (PSYOP) as part of its arsenal with the issue of statements from the top hierarchy, in the form of video tapes, voice recorded speeches, and CD ROMs that are meant for particular audiences at a certain point of time.¹⁷² The use of Al Jazeera, other Arabic print media, and the Internet to broadcast their ideology and influence people around the world implies an intricate understanding of this tool of strategic importance (PSYOP and propaganda) by a terrorist conglomerate like Al Qaeda. The choice of physical targets like the World Trade Center and the Pentagon, and their significance to the world in general and the United States in particular, has transformed the way nation states acknowledge terrorism as a threat to normal societal values. It has also defined a template for response toward such acts, generated a rather long-term involvement of the world with terrorism as the core issue, and has also been able to thrust Al Qaeda to the center stage of world

¹⁷² Robert S. Earl and Norman E. Emery, "A Terrorist Approach to Information Operations" (Masters Thesis, Naval Postgraduate School, 2003), 75-77. Also see Christopher M. Blanchard, "Al Qaeda: Statements and Evolving Ideology," *CRS Report for Congress*, Nov 2004 and updated periodically [on-line], available from <http://www.fas.org/irp/crs/RS21973.pdf>. The author brings out how statements from the Al Qaeda leadership have evolved over time to address different audiences.

affairs.¹⁷³ This may have been the ultimate agenda of Al Qaeda while undertaking such a watershed event. The influence of such events on the Islamic diaspora in modern societies like Spain and the United Kingdom have had a profound impact that led to terrorist attacks in both of those countries in recent times. Al Qaeda appears to carry out well planned and methodical PSYOP that are directed toward specific audiences to elicit specific responses. The post 9/11 statements from Al Qaeda deputy Ayman al-Zawahiri address various audiences with messages designed exclusively for them. The major target audiences are the United States—the government and the people, people of Western world, Islamist terrorists worldwide, Islamic people in the Middle East, and the Islamic diaspora as part of Western societies. The use of an American recruit, Adam Gadahn or ‘Azzam the American,’ a California-born man, to address the people of the United States that included an appeal to convert to Islam and a threat to undertake attacks in the United States with a promise that it will *make the streets of America "run red with blood"*¹⁷⁴ signifies two important strategies from the Al Qaeda perspective. Firstly, it understands the fact that the messenger is as important as the message that he delivers, and secondly, it wants to be perceived as an organization that has established deep roots within Western societies. The Al Qaeda propaganda machinery is well established at places where there is support for Islamist terrorists as well as on the Internet. Al Qaeda is also not averse to using technology to propagate their ideology. This is evident from the fact that there are a number of websites on the Internet that support

¹⁷³ Brian Michael Jenkins. Remarks before the *National Commission on Terrorist Attacks upon the United States*, Mar 2003.

¹⁷⁴ Middle Eastern Media Research Institute (MEMRI), “Al-Qaeda Operative Adam Gadahn, aka ‘Azzam the American’: ‘The Truth of Islam is Sweeping Across America and Constitutes a Fearsome Challenge to the Security, Identity, and Survival of the Crusader State [America]’; Time is Running Out to Convert to Islam Before You Meet the Dismal Fate of Thousands Before You,” Special Dispatch Series No. 1281, Sep 6, 2006 [on-line], available from <http://memri.org/bin/articles.cgi?Page=archives&Area=sd&ID=SP128106>. MEMRI, “American Al-Qaeda Operative Adam Gadahn, Al-Qaeda Deputy Al-Zawahiri, and London Bomber Shehzad Tanweer in New Al-Sahab/Al-Qaeda Film Marking the First Anniversary of the 7/7 London Bombings,” Special Dispatch Series No. 1201, Jul 11, 2006 [on-line], available from <http://memri.org/bin/articles.cgi?Page=archives&Area=sd&ID=SP120106>. Notes and narrative of Adam Gadahn’s 2004 video [on-line], available from http://www.globalsecurity.org/security/profiles/adam_gadahn_2004_video.htm. Also see, Robert Spencer, “The New Face of Al Qaeda,” *FrontPageMagazine*, Jun 1, 2004 [on-line], available from <http://www.frontpagemag.com/Articles/ReadArticle.asp?ID=13591>.

Islamist terrorists and Al Qaeda in particular;¹⁷⁵ these are the tools that Al Qaeda uses in carrying out its propaganda campaign on a world stage. Similarly, large a number of CDs, tapes, and print-related propaganda material are distributed to the various audiences to achieve PSYOP and propaganda objectives. These activities may not be directly controlled by Al Qaeda but have now grown into a business enterprise in areas like Iraq, Palestine, and Pakistan, and are more or less in 'auto mode' of production and delivery.

The Libicki version of PSYWAR that categorizes it into four parts: against the national will, against enemy commanders, cultural conflict, and against the troops, has been adopted and understood by Al Qaeda as well. There seems to be well directed PSYWAR themes emanating from Al Qaeda against all four of these targets.

The concept of the Combat Camera, as defined in the Information Operations doctrine of the United States,¹⁷⁶ is actually being used profusely by Al Qaeda and its affiliate groups in a perfect manner. Al Qaeda now has a self-proclaimed media production company by the name of Al Sahab; the literal meaning of the word is 'cloud' in Arabic. Al Sahab releases videos through the medium of the Internet from time to time, from taped suicide messages by the 9/11 hijackers to images of gun battles and bombings spearheaded by Al Qaeda.¹⁷⁷ The timing of the release of the videos is synchronized with dates pertaining to important events. For instance, a few days before the fifth anniversary of 9/11, Al Sahab released a number of videos reviewing that event and hence keeping the memory alive in the eyes of Islamist terrorists and of the

¹⁷⁵ Timothy L. Thomas, "Al Qaeda and the Internet: The Danger of 'Cyberplanning' Parameters," United States Army War College, Spring 2003, 112-123. This paper names a number of websites that are linked to Al Qaeda and which have been monitored by the United States intelligence agencies since 9/11. The contents of these websites range from news about Al Qaeda to their statements and *fatwas* from encrypted information for command and control to tailored propaganda activities.

¹⁷⁶ See Chapter II of this thesis for definition of Combat Camera.

¹⁷⁷ Hassan M. Fattah, "Al Qaeda's Increasingly Reliant on Media," *New York Times*, Sep 30, 2006 [on-line], available from <http://www.nytimes.com/2006/09/30/world/30jordan.html?ex=1317268800&en=fb3721e1c7902aae&ei=5088&partner=rssnyt&emc=rss>

world in general.¹⁷⁸ The quality of Al Sahab's videos indicates that they are produced with modern equipment, possibly low-end professional hardware but by competent technicians. The quality of the video productions has increased tremendously; the videos now display many of the features common in professional media productions such as standardized logos, digitally inserted backgrounds, and subtitles, often in English.¹⁷⁹ Al Qaeda, since 2005, has switched the method of their video releases from a tape given to media channels like Al Jazeera to the recent method of distributing it on the Internet.

A video carries enormous propaganda value for Al Qaeda in Iraq and its supporters. In 2005, a 16-minute videotape was released by Abu Musab Al Zarqawi and was available on various Jihadi websites on the Internet almost instantaneously, which confirms the sophisticated media efforts that Al Qaeda relies on and their understanding of media as a powerful weapon in modern wars.¹⁸⁰ The videotape titled "Top 10" depicts critical operations undertaken by the Zarqawi group against the United States-led forces. On September 21, 2005, Al Qaeda made an inroad into the world of television broadcasting by launching its first edition of Sawt al Khilafa (Caliphate Voice Channel) in the form of a videotape, which was widely available on the Internet.¹⁸¹ The third edition of Sawt al Khilafa was posted on October 10, 2005 across Islamist message boards by the Global Islamic Media Front (GIMF), an Al Qaeda mouthpiece believed to be in Europe or the Middle East, that projects headlines on the Jihadi front.¹⁸² Sawat al Khilafa's recent broadcast was posted on January 20, 2007 in which it

¹⁷⁸ Hassan M. Fattah, "Al Qaeda's Increasingly Reliant on Media."

¹⁷⁹ Stratfor Crisis Center, "As-Sahab: Al Qaeda's Nebulous Media Branch," *Stratfor*, Sep 8, 2006 [on-line], available from <https://www.stratfor.com/offers/alerts/index.php?ref=FOX&camp=stratforalert&>

¹⁸⁰ Bouchaib Slim, "The Internet and Al Qaeda – How bin Laden uses Technology for his Cause," Institute of Defense and Strategic Studies, Singapore, Sep 8, 2005 [on-line], available from <http://www.idss.edu.sg/publications/Perspective/IDSS622005.pdf>

¹⁸¹ Bouchaib Slim, "Al Qaeda wants its own TV," Institute of Defense and Strategic Studies, Singapore, Oct 24, 2005 [on-line], available from <http://www.idss.edu.sg/publications/Perspective/IDSS732005.pdf>

¹⁸² Sawt al Khilafa, Third Edition of Voice of the Caliphate [on-line], available from http://www.clandestineradio.com/audio/meast_aq_caliphate_051010.wmv

also gave out its future program schedules.¹⁸³ Such media production and distribution companies are now seen as active in many regions around the world and there could be an effort in the Jihadi circles to amalgamate such organizations under the banner of the Global Islamic Media Front, which appears to be the *authentic* Al Qaeda mouth-piece, so as to achieve better coordination and synchronization.

3. Al Qaeda Perspective on Electronic Warfare and Operational Security

The lessons in the Al Qaeda manual, *Military Studies in the Jihad Against the Tyrants*, highlight the use of anti-surveillance and counter-measures to adversary electronic warfare capability.¹⁸⁴ The ability to use radio-controlled improvised explosive devices by Al Qaeda and many of its associates against security forces in Afghanistan and Iraq, as well as in Jammu and Kashmir (India), implies stress on such concepts during training in many of the Jihadi camps, as well as the ability to adopt to modern means to attack their target. The Electronic Warfare aspects of Al Qaeda are highlighted by the counter-measures that it takes to thwart attempts to monitor its communications, its ability to hide itself from the direction-finding methods of various intelligence agencies around the world, and the development of various counter counter-measures for detonating explosives remotely through the use of cell-phones and other wireless technology.¹⁸⁵

The Jihad Manual also points toward the emphasis and appreciation of maintaining secrecy in the planning and conduct of operations in its ninth lesson titled 'Security Plan,' and projects it as a major factor that will ensure success in any action. Daniel Byman feels that the inner core of Al Qaeda is extremely sensitive to operational security and terms it an important reason why this

¹⁸³ MEMRI, Special Dispatch Series No. 1442, Jan 26, 2007 [on-line], available from <http://memri.org/bin/articles.cgi?Page=archives&Area=sd&ID=SP144207>

¹⁸⁴ Al Qaeda Manual, "Declaration of Jihad Against the Tyrants."

¹⁸⁵ Abdul Hameed Bakier, "The Evolution of Jihadi Electronic Counter-Measures," *Terrorism Monitor*, The Jamestown Foundation, Vol. IV, Issue 17, Sep 8, 2006 [on-line], available from http://jamestown.org/terrorism/news/uploads/TM_004_017.pdf.

organization has not yet collapsed.¹⁸⁶ The aspects of operational security are closely integrated into all activities associated with Al Qaeda, from successfully keeping the locations of their leaders secret to leaving no traces on the Internet about the uploading of their videos, from keeping their future operations secret, to their ability to encrypt their communications for command and control. Although the 9/11 Commission Report says that *'the 9/11 attacks were a shock, but they should not have come as a surprise,'* and acknowledges the fact that a number of warnings of the attack were discounted by the intelligence agencies,¹⁸⁷ the OPSEC aspects undertaken by the members of Al Qaeda to prosecute such an attack were still quite significant as was its blending of counter-intelligence measures.¹⁸⁸ Similar measures are bound to be taken by the organization in conducting future such attacks. The easier way of blaming the intelligence agencies as an after-thought and pondering missed opportunities does have its benefits, but to understand and counter the OPSEC measures of an efficient adversary like Al Qaeda is equally important toward a successful counter-terrorism strategy.

4. Al Qaeda's Use of Deception

In May 2001, bin Laden deceived U.S. technical collection systems by allowing a major attack plan to be monitored¹⁸⁹ and was thus able to generate a specific response. The setting up of deadlines to carry out an attack and then actually carrying out the attack much after the projected deadline, is a form of deception that Al Qaeda may have adopted to actually bring about a sense of complacency in its target to achieve the desired success. Authors Shultz and Beitler feel that the use of denial and deception by Al Qaeda is shaped by the

¹⁸⁶ Daniel L. Byman, "Al Qaeda as an Adversary: Do We Understand Our Enemy?" 154.

¹⁸⁷ United States of America, "The 9/11 Commission Report: The Final Report of the Commission on Terrorists Attacks Upon the United States" [on-line], available from <http://www.9-11commission.gov/report/index.htm>

¹⁸⁸ Richard H. Shultz, Jr. and Ruth Margolies Beitler, "Tactical Deception and Strategic Surprise in Al Qaeda's Operations," *Middle East Review of International Affairs (MEIRA)*, Vol. 8, No. 2, Jun 2004.

¹⁸⁹ Earl and Emery, "Terrorist Approach to Information Operations," 79.

concepts of *taqiyya* and *kitman* found in Islam.¹⁹⁰ The case studies undertaken by the two authors, with regard to the East African bombings of 1998 and the attack on 9/11, point to deception measures used by Al Qaeda. The deceptions include the use of false identities and documents, the use of deceptive front organizations, using deception to gain entry into the United States, and to appear and behave as an ordinary American. The most formidable deception achieved by Al Qaeda in the attacks of 9/11 was the method used to carry out such an attack. The use of hijacked planes as the ideal bombs was never acknowledged by intelligence agencies until 9/11. Another example of an apparently successful deception undertaken by Al Qaeda was during the siege of Tora Bora wherein Osama Bin Laden's Moroccan body guard, Abdallah Tabarak, used Bin Laden's satellite phone in order to divert the U.S. forces closing in on Bin Laden and hence allowing him to escape.¹⁹¹

5. Physical Attack – Shaping the Information Environment

The synchronization of physical targets and their positive impact on the information environment has been a challenging task for militaries around the world, but in the case of Al Qaeda, it seems that it has been able to fuse physical attacks and the related information environment to its advantage. The attack of 9/11 by Al Qaeda in the continental United States had an impact on multiple audiences.¹⁹² The selection of targets and their impact resonated globally due to the live images that flowed through media channels instantaneously, which made it into a world event having global consequences. A similar event that may not be blamed solely on Al Qaeda, but may be attributed to the information environment that Al Qaeda created, is the attacks on the trains in Spain in 2004. The exploitation of a fragile political situation in Spain, coupled with adequate use of the media, and finally culminating with the attack in Madrid exactly two years and

¹⁹⁰ Shultz and Beitler, "Tactical Deception and Strategic Surprise in Al Qaeda's Operations."

¹⁹¹ Peter Finn, "Bin Laden Used Ruse to Flee: Moroccans Say Guard Took Phone at Tora Bora," *Washington Post*, Jan 21, 2003 [on-line], available from <http://www.washingtonpost.com/ac2/wp-dyn/A19238-2003Jan20?language=printer>; accessed May 28, 2007.

¹⁹² Earl and Emery, "Terrorist Approach to Information Operations," 75-78.

six months after 9/11 on March 11, 2004, led to the subsequent regime change in Spain through elections held sixty hours after the attack.¹⁹³ This may have been the catalyst that provided an exit option for the Spanish troops from Iraq. Although Al Qaeda may not have been involved directly in the Madrid bombings, the group of people involved was definitely inspired by Al Qaeda. The group was motivated by Osama Bin Laden's address in 2003 in which he threatened prompt and severe actions against the countries that participated in the war in Iraq, including Spain and Britain.¹⁹⁴ The fact that a document written in Arabic, on the Internet, some five months before the Madrid bombing that spelled out exactly the same options and correctly assessed the subsequent events, establishes the planning and foresight that Al Qaeda undertakes to carry out an attack, and the impact that the information environment has on diverse but motivated groups of terrorists.¹⁹⁵ The London subway bombing of July 7, 2005, also follows similar patterns; the bombers were resident Muslims duly indoctrinated by Islamist fundamentalist teachings, and claims for the attacks were made by two groups presumably affiliated to Al Qaeda that were duly discounted by intelligence agencies. Nevertheless, the point to note is that the bombers were definitely inspired by Al Qaeda.¹⁹⁶ Since the London bombings, the British government is under intense pressure regarding its policies and support for the invasion of Iraq.

The 'filtering and fusing'¹⁹⁷ of information and its accurate judgment may be seen as an example of a successful physical attack campaign by Al Qaeda

¹⁹³ Jonathan B. Smith, "The Madrid Train Bombing and the Emergence of Al Qaeda 2.0."

¹⁹⁴ Elizabeth Nash, "Madrid Bombers were Inspired by Bin Laden Address," *The Independent*, Nov 7, 2006 [on-line], available from <http://news.independent.co.uk/europe/article1961431.ece>. An excellent summary of the Madrid Train Bombings and the following investigation is available from Wikipedia: http://en.wikipedia.org/wiki/11_March_2004_Madrid_attacks

¹⁹⁵ PBS Frontline Online Video Report, "Al Qaeda's New Front," directed by Neil Docherty, Jan 25, 2005 [on-line], available from <http://www.pbs.org/wgbh/pages/frontline/shows/front/view/>

¹⁹⁶ Jason Bennetto and Ian Herbert, "London bombings: the Truth Emerges," *The Independent*, Aug 13, 2005 [on-line], available from <http://news.independent.co.uk/uk/crime/article305547.ece>. Wikipedia has been an informative source on the London Bombing - http://en.wikipedia.org/wiki/7_July_2005_London_bombings

¹⁹⁷ Robert J. Bunker and Matt Begert, "Operational Combat Analysis of Al Qaeda Network," in *Networks, Terrorism and Global Insurgency*, ed Robert J. Bunker (New York: Routledge, 2005), 154.

using the Information Age paradigms. The ability to inspire and incite such physical attacks that change the information environment dramatically, is the unique strategy of Al Qaeda that is visible, accompanied by the show of acceptance and bravado that Al Qaeda leaders accord to such events.¹⁹⁸

6. Public Diplomacy and Support to Civilian Structures – The Al Qaeda Way

The building of global Islamist terrorist networks has been facilitated by the policies of the Western world toward the problems of the Middle East and the Islamic world in general. This has been successfully integrated by Al Qaeda in its Public Diplomacy campaign that highlights the apathy of the Western world toward the Muslim population, provides the Muslim world with an ideology that has the ability to take on the Western world, and which is duly coupled with efforts to provide support to the civilian structures in the Muslim world. The public diplomacy campaign can be seen through the statements of the Al Qaeda leaders, Osama Bin Laden and Ayman al-Zawahiri, which are released from time to time. The support of civilian structures is more in terms of words, not deeds, but an understanding of the problems being faced by common Muslim people in Iraq, Pakistan, Saudi Arabia, etc., is still evident through the statements of Al Qaeda leaders, and provides the required psychological impact to different audiences in the Islamic world. In addition, various Islamist organizations affiliated with Al Qaeda do provide physical support to the people in their region, like the support provided by Lashkar-e Taiba after the devastating earthquake in Pakistan-occupied Kashmir in 2005.¹⁹⁹ This is supported by the report by the United States of America State Department's annual *Country Reports on*

¹⁹⁸ MEMRI TV Monitor Project, "Excerpts of Statement by Ayman al-Zawahiri aired on Al Jazeera TV on Sep 19, 2005" [on-line], available from <http://www.memritv.org/Transcript.asp?P1=856>. In this statement Zawahiri in fact claims responsibility for the London bombings and also gives flowing accolades to the bombers.

¹⁹⁹ Senator Joseph R. Biden, Jr., "Floor Statement: Earthquake Relief for Pakistan," Oct 25, 2005 [on-line], available from <http://biden.senate.gov/newsroom/details.cfm?id=249256>. The senator, while requesting more aid for the earthquake victims, remarked that extremist groups like Jamaat ul-Dawa, an affiliate of Lashkar-e Taiba, had been running a major field hospital in the region, and that several relief convoys were organized by the Al-Khidmat Foundation, a charity branch of the hard-line Islamist party Jamaat-e Islami.

*Terrorism 2005: "The October 8 earthquake that devastated Pakistan, killing more than 80,000, created an opportunity for al-Qaida-linked relief organizations to provide aid to survivors in the affected areas. The Government of Pakistan provided its own relief operations, facilitated international relief operations, and promised to shut down known terrorist relief camps, but nonetheless several such groups were able to raise funds and reap public relations benefits."*²⁰⁰ Efforts like this to support the public structures and social institutions, both in normal times as well as during calamities, are encouraged by Al Qaeda and thus are a major source of 'winning the hearts and minds' of the local community.

7. Economic Information Warfare from Al Qaeda's Viewpoint

The statements of Osama bin Laden exonerating his followers to attack targets that are symbols of the United States economy, and his understanding of the economics of war, which are evident from his reported speeches broadcast beginning the year 2001,²⁰¹ clearly indicate an acknowledgment of future attacks with an intention to disrupt the economic infrastructure, as well as a prolonged engagement with a view to target the economy.²⁰² The timings of such statements from the Al Qaeda leadership are also worth considering. In October 2004, on the eve of the United States' presidential election, Bin Laden's statement urged Americans to reevaluate their policies toward the Islamic world and threatened to bleed and bankrupt the United States. The economic impact and the dependence of the United States' economy on Middle East oil has been highlighted by both Bin Laden and Zawahiri. Bin Laden has called for Muslim societies to become more self-reliant economically and has described economic boycotts as an effective strategy. Zawahiri has urged the Islamist terrorists to attack the oil infrastructure in the Middle East so that it indirectly affects the

²⁰⁰ United States of America, *Country Reports on Terrorism 2005*, Chapter 5: South Asia Overview, 153 [on-line], available from <http://www.state.gov/documents/organization/65475.pdf>

²⁰¹ See quotes from statements of Osama Bin Laden at the beginning of this chapter.

²⁰² Christopher M. Blanchard, "Al Qaeda: Statements and Evolving Ideology," *CRS Report for Congress*, Report No. RL32759, Jun 20, 2005 [on-line], available from <http://www.fas.org/sgp/crs/terror/RL32759.pdf>.

Western world:²⁰³ *“to focus their attacks on the oil wells stolen from the Muslims, because most of the revenues of this oil go to the enemies of Islam.”*

The economic warfare professed by Al Qaeda not only includes attacking the economic targets of the Western world, but also the necessity of building its own financial backbone through front organizations, illegitimate charity foundations, and the investment of its own funds in legitimate activities along with its efforts to make this network invisible to the intelligence agencies. This has been quite evident in its efforts toward developing its own financial infrastructure during its evolution phase, prior to 9/11, and the same still continues.

8. Al Qaeda Moving Towards Cyberterrorism

Cyberterrorism is an attractive option for modern terrorists who value its anonymity, its potential to inflict massive damage, its psychological impact, and its media appeal.²⁰⁴ Al Qaeda and its terrorist affiliates have been indulging in capability-enhancement in this new form of terror through concentrated efforts in the form of the introduction of science and computer-related curricula in the various Jihadi madrassas and training camps, as well as efforts to achieve higher education in computer sciences through covert and overt means. The examples of L'Houssaine Kherchtou and Ziyad Khalil²⁰⁵ and Adnan El'Shukrijumah²⁰⁶ who all majored in computer sciences from a college in Florida, are prominent. Al Qaeda also lays emphasis toward motivating the educated class to join their ranks; this is evident from the fact that the top leadership members of Al Qaeda who have been captured show that these individuals are highly educated in their respective fields.

²⁰³ Stephen Ulph, “Al-Zawahiri Encourages Targeting of Gulf Oil...,” *Terrorism Focus*, The Jamestown Foundation, Vol. II, Issue 23, Dec 13, 2005; [on-line], available from http://jamestown.org/terrorism/news/uploads/tf_002_023.pdf.

²⁰⁴ Gabriel Weimann, “Cyberterrorism: The Sum of All Fears,” *United States Institute of Peace*, May 2004.

²⁰⁵ Dan Verton, *Black Ice: The Invisible Threat of Cyber Terror* (Emeryville, CA: McGraw-Hill, 2003), 86-93.

²⁰⁶ PBS Frontline Online Video Report, *Cyberwar*.

The transformation of modern economies into adopting networked architecture to fit into the *Globalization* phenomena, their dependence on modern means of communication, especially the Internet, for their efficiency and commercial growth, has projected a vast number of potentially vulnerable targets that are open for cyber attacks. This scenario, coupled with the driving factors behind Al Qaeda's operations of "intent, resources and opportunity,"²⁰⁷ is bound to be exploited by Al Qaeda in times to come and may well be the *coup de grâce*.

The capture of computers and laptops in Afghanistan has established beyond doubt the use of information technology and the design of Al Qaeda's global network²⁰⁸ and also provides sufficient evidence toward its effort to collect target data of the United States' critical infrastructure.²⁰⁹ A cyber attack intended to harm the United States economy will target the computers and systems of critical civilian infrastructure, wherein the existence of innumerable vulnerabilities have been acknowledged.²¹⁰ The Nimda worm that rode the Internet immediately after 9/11, caused damage worldwide, and was of significant *nuisance value* especially to the United States' economy in proportionate terms, but the question still comes to mind—was it a coincidence? So far, the relationship between the 9/11 attacks and the virus in cyberspace has not been established, but it is highly possible that the next major strike by Al Qaeda may coincide with an increased activity in the cyber domain. An interview by Dan Verton of Omar Bakri Muhammad, the leader of Al Muhajirun, a London based organization and a self-styled spokesman for Bin Laden, clearly indicates the interest of Al Qaeda in cyberterrorism and its future exploitation by Al Qaeda and affiliate groups.²¹¹ In recent times, a new website has been launched that incites 'Electronic Jihad' and

²⁰⁷ Dan Verton, *Black Ice*, 110.

²⁰⁸ Alan Cullison and Andrew Higgins, "Files Found: A Computer in Kabul Yields a Chilling Array of Al Qaeda Memos — Talk of 'Hitting Americans' and Making Nerve Gas; Spats Over Salaries, Rent — A Guide to the 'Company,'" *Wall Street Journal*, Dec 31, 2001.

²⁰⁹ Barton Gellman, "Cyber-Attacks by Al Qaeda Feared," *Washington Post*, Jun 26, 2002.

²¹⁰ John Rollins and Clay Wilson, "Computer Attack and Cyberterrorism: Vulnerabilities and Policy Issues for Congress," *CRS Report for Congress*, Report No. RL 32114, Oct 20, 2005 [online], available from <http://fpc.state.gov/documents/organization/45184.pdf>.

²¹¹ Dan Verton, *Black Ice*, 83-85

aims to target websites that insult Islam and Islamic sacred figures. The website offers software to undertake cyber attacks and it also provides the Internet address of the target website to attack.²¹² These websites, though nascent in their format, definitely provide an avenue that could be exploited by both *script-kiddies* and hardcore, technically savvy terrorists to exploit the commercial infrastructure that is so very dependent on the Internet. The same apprehension was also expressed by the present secretary of state in her remark on March 22, 2001, *"Today, the cyber economy is the economy. Corrupt those networks and you disrupt this nation."* There is the possibility that Al Qaeda and its affiliates find cyberspace an easy avenue to launch their Jihadi attacks to destabilize and disrupt commerce.

9. Internet as Al Qaeda's Battleground

Timothy L. Thomas has indicated that evidence of Al Qaeda using the Internet to plan the 9/11 attack does exist and that the Internet is being used as a "cyberplanning" tool by terrorists.²¹³ The former chairman of the Critical Infrastructure Board, Richard Clarke, remarked in February 2002:

Al Qaeda was using the Internet to do at least reconnaissance of American utilities and American facilities. If you pull up all the unclassified information together, sometimes it adds up to something that ought to be classified.

The Internet has been used by Al Qaeda and its affiliates for propaganda, communication, training, recruitment, fund raising and transfer (through Hawala channels), target profiling, and to a lesser extent, until now, for cyber attacks. The number of websites that are linked to Al Qaeda, as mentioned by Thomas,²¹⁴ is increasing; the Jihadi ideology of Al Qaeda is also apparent in scores of other websites, even those credited to specific individuals. Al Qaeda's Al Neda website publishes summaries of international news coverage of Al-

²¹² Abdul Hameed Bakier, "New Websites Incites Electronic Jihad," *Terrorism Focus*, The Jameston Foundation, Vol. III, Issue 38, Oct 3, 2006.

²¹³ Timothy L. Thomas, "Al Qaeda and the Internet: The Danger of 'Cyberplanning.'"

²¹⁴ Timothy L. Thomas, "Al Qaeda and the Internet: The Danger of 'Cyberplanning.'"

Qaeda and its own reporting of fighting in Afghanistan along with many other articles, fatwas, and teachings of Muslim radical scholars. Recent Jihadi propaganda outlets on the Internet include the Global Islamic Media Front that has now published its 14th issue. The issue is 60 pages long and covers topics varying from religious discourses, the importance of pursuing Jihad, and the necessity of security in Jihadi operations. The same media outlet also releases other Internet publications like the Sada al-Jihad (The Echo of Jihad), Sada al-Rafidain (The Mesopotamian Echo), Sawt al-Khilafa (The Voice of Caliphate), and other similar communiqués.²¹⁵ Such Jihadi teachings on the Internet are available for scores of moderate, educated, and yet-to-be terrorist Muslim youths in Western countries for leading them toward their gradual indoctrination.

The use of the Internet by Al Qaeda for nefarious means is alien to societies advocating freedom and basic human rights. The Internet now provides an affordable and straight-forward avenue to other smaller non-state actors and terrorists groups for their interaction and affiliation with Al Qaeda. This is likely to actually influence the operations and actions undertaken by these groups in their regional domains and may also lead to Al Qaeda's role being taken over by a regional terrorist group, once the top hierarchy of Al Qaeda is captured or destroyed.

With the loss of Afghani training camps, Al Qaeda has adapted by increasing its use of the Internet for propaganda, recruiting, and training purposes in addition to its continuous reliance on madarssas.²¹⁶ The Internet has been transformed into a virtual training ground for the terrorists with the availability of Jihadi manuals containing lessons on everything from propaganda to making specialized explosives. Some experts also declare that the Internet is one of Al Qaeda's key survival tools,²¹⁷ through which it is waging a relentless propaganda campaign to incite war against the West. The emphasis on the

²¹⁵ Abdul Hameed Bakier, "The 14th Issue of Sada al-Jihad Released," *Terrorism Focus*, The Jameston Foundation, Vol. IV, Issue 10, Apr 17, 2007.

²¹⁶ Robert J. Bunker and Matt Begert, "Operational Combat Analysis of Al Qaeda Network."

²¹⁷ ABC Online, "How Al Qaeda Uses the Internet," Mar 19, 2004 [on-line], available from <http://www.abc.net.au/news/newsitems/s1069629.htm>.

exploitation of the Internet and other technology-intensive equipment for Jihadi operations is also on the increase. It was evident from the first publication of a 64-page periodic magazine named 'Technical Mujahid' (Al-Mujahid al-Teqany) on November 28, 2006 that includes articles on computer and Internet security, explanation of the Global Positioning System satellites and video types, and editing and encoding in different formats.²¹⁸ The recent issue of the same magazine published in February 2007 covers technical topics like covert communications and hiding secrets inside images, designing Jihad websites, video technology, and subtitling video clips.²¹⁹ The use of solid encryption technologies and specialized techniques like steganography for passing command and control messages amply displays the path of constant learning and improvement adopted by Al Qaeda in this fast-changing field.

The maze of interconnectivity that is inherent in the Internet, the availability of web-based technologies, Jihadi websites, and chat rooms have in fact created an almost invisible global communication infrastructure for Al Qaeda and various other affiliated groups. The Internet is now the ultimate weapon in the hand of Al Qaeda and is being utilized to serve the next generation of Jihadists.²²⁰ The Al Qaeda of the future may have dedicated cyber-terrorists in its rank and file, like the G-Force Pakistan that has founded the Al Qaeda Alliance Online.²²¹ The future terrorists are now growing up in the Information Age of Internet and cyberspace and a hacker community of the same religious bearing, duly indoctrinated, may undertake to carry out cyber attacks on behalf of Al Qaeda. The transformation from "cyberplanning" to "cyberattack" may not be too far in the future.

²¹⁸ Search for International Terrorist Entities (SITE) Institute, "First Issue of the Technical Mujahid, a New Periodic Magazine Related to Technology and Internet Security Published by al-Fajr Information Center," Nov 28, 2006 [on-line], available from <http://www.siteinstitute.org/bin/articles.cgi?ID=publications229606&Category=publications&Subcategory=0>.

²¹⁹ Abdul Hameed Bakier, "The New Issue of Technical Mujahid, a Training Manual for Jihadis," *Terrorism Monitor*, The Jameston Foundation, Vol. V, Issue 6, Mar 29, 2007.

²²⁰ Bouchaib Slim, "The Internet and Al Qaeda."

²²¹ Dorothy E. Denning, "Is Cyber Terror Coming?" George C. Marshall Institute, May 2, 2002 [on-line], available from <http://www.marshall.org/pdf/materials/58.pdf>.

C. AL QAEDA—AMORPHOUS, INVISIBLE, AND ADAPTIVE

Al Qaeda may not have correctly assessed the swift, measured and doctrinally diverse response to 9/11 in the form of innovative operations launched by the United States and its allies in Afghanistan that led to the fall of the Taliban regime and the collapse of an established base of Al Qaeda.²²² Nevertheless, in spite of losing Afghanistan, many of its operatives killed or captured, several of its financial front organizations fractured, several terrorist plots unearthed, and a manifold increase in defensive measures around the globe, Al Qaeda still remains a major threat to the United States and its allies.²²³ Similar sentiments are echoed in the latest Country Report on Terrorism released on 30 April 2007; *'Overall, AQ and its loose confederation of affiliated movements remain the most immediate national security threat to the United States and a significant security challenge to the international community.'*²²⁴ The intervention in Iraq by the United States-led forces has once again allowed Al Qaeda to emerge ahead in the domain of information operations. The “provoke and bait” and “bleeding wars” approach²²⁵ adopted by Al Qaeda is appearing to be a success with each passing day along with the diminishing rating of the president of United States due to the war in Iraq. A comparison of Al Qaeda from the lenses of information operations, with 9/11 as the defining time-line, provides us with ample proof that there may be a need to suitably change the strategy adopted by us in pursuit of such an adaptive enemy.

²²² John Arquilla, “The Problem: War on Terror – How to Win,” *Foreign Policy*, May/Jun2007 Issue 160, 45.

²²³ United States of America, *9/11 Five Years Later: Success and Challenges*, Sep 2006 [on-line], available from <http://www.state.gov/documents/organization/72027.pdf>; accessed May 10, 2007.

²²⁴ United States of America, *Country Reports on Terrorism*, 30 Apr 2007 [on-line], available from <http://www.state.gov/s/ct/rls/crt/2006/>; Internet; accessed 10 May 2007. The particular reference in the report is in line with the statement given by George Tenet, the former director of CIA to the National Commission on Terrorist Attacks on the United States on Mar 24, 2004 wherein he stated, “... *but Al Qaeda is not the limit of terrorist threat worldwide. Al Qaeda has infected others with its ideology, which depicts the United States as Islam’s greatest foe.*”

²²⁵ Bruce Riedel, “Al Qaeda Strikes Back,” *Foreign Affairs*, May/Jun 2007, Vol. 86, Issue 3, 17.

	AI Qaeda Prior to 9/11	AI Qaeda – Post 9/11
Organization	<ul style="list-style-type: none"> • Somewhat hierarchical, well structured and closely administered. One major hub evident. • Emphasis on establishment of Islamist terrorist networks around the world. • Trying to establish itself as the <i>vanguard</i> of Islamist militancy around the world. • Activities visible in its <i>base</i> in Afghanistan. • Leadership is accessible and more visible. Greater command and control directives. 	<ul style="list-style-type: none"> • Loosely structured, distributed, <i>autonomous mode of operation</i> – emphasis on independently undertaken but ideologically commensurate operations. Multi-hub structure now evident. • Dispersed, isolated with small cells capable of planning and executing independent missions. • Network established – formal affiliations, loose bonding, and ideologically similar nodes around the world. Greater emphasis and motivations to ideologically similar groups around the world. • Islamist terrorism and Al Qaeda are synonymous. Identified as an able adversary to the <i>super powers</i> of the world. • Al Qaeda <i>base</i> now re-located in and around Quetta and Afghanistan-Pakistan border region.²²⁶ • Leadership is invisible and elusive. Emphasis on strategic guidance and tactical advice to affiliate organizations. Core leadership of Al Qaeda still exists.²²⁷ Al Qaeda and Bin Laden at the center stage – acceptable leader and chief mentor for radical Islamist movement all over the world.

²²⁶ Bruce Rieidel, "Al Qaeda Strikes Back," 25.

²²⁷ Kenneth Katzman, "Al Qaeda: Profile and Threat Assessment."

Psychological Operations, Propaganda and Combat Camera	<ul style="list-style-type: none"> • Loosely planned psychological operations – greater emphasis on <i>near</i> (Islamic audience – terrorists, leaders and people) audiences. • Western media was considered to have a greater reach and appeal hence, interviews and audiences to western journalists considered important. • Media organization was in the development phase and was not adequately integrated with the Internet. • Propaganda was not too planned and based on <i>more words and less deeds</i>. • Video messages not seen as too relevant towards the happenings around the world, unprofessional production ability and emphasis toward TV type broadcasts. 	<ul style="list-style-type: none"> • Well planned psychological operations – equal emphasis on <i>near</i> and <i>far</i> (world leadership, people and Islamic diaspora around the world) audiences. • Al Jazeera's emergence on the world stage and the proliferation of Internet world-wide has changed Al Qaeda's effort toward approaching Western media to project its voice globally – <i>the media now runs towards Al Qaeda</i>. • Well synchronized media outlets – Global Islamic Media Front, Al Sahab, Sawt al Khilafa, etc as production and distribution agencies. • Constant and continuous <i>media wars</i> between Al Qaeda and the United States and its allies. • Video production – slick and professional – world-wide distribution is achieved instantaneously through the Internet. Propaganda is directed towards the national will of the adversary, the commanders and the troops in field, as well as projecting the issue of a cultural conflict on the wide front. This seems to be similar to what Libicki described as different levels of PSYWAR.
Electronic Warfare and Operational Security	<ul style="list-style-type: none"> • Al Qaeda leaders not averse to using cell phones and satellite phones and did not perceive it as a threat. The use of encrypted radio sets in tactical situations was limited. • Use of cell phones and similar wireless devices for triggering remote bombs not dominant. • Operational security in all matters important. 	<ul style="list-style-type: none"> • Improvised Explosive Devices modified to be remotely controlled through electromagnetic signals. Use of cell phones and hand held radios to detonate bombs is on the increase. • Greater emphasis on electronic counter-counter measures in training and tactics – use of encrypted radio sets on the increase. Al Qaeda leaders wary of using cell / satellite phones. • Greater emphasis on operational security – as important as ever.

Deception	<ul style="list-style-type: none"> • Deception meticulously planned during operations on focused targets. 	<ul style="list-style-type: none"> • Deception more due to increase in number of diverse and unrelated terrorists around the world, and due to greater number of targets available. Event prediction and intelligence gathering more difficult. • Deception – equal emphasis.
Physical Attacks	<ul style="list-style-type: none"> • Well planned physical attacks – targets of significance. • Unusually patient in planning and execution of attacks.²²⁸ 	<ul style="list-style-type: none"> • Attacks on United States and allies interests around the world have been successfully prosecuted and this will remain the principal strategy. Al Qaeda has made a decision to engage fully in Iraq. Targeting continental United States may not be in the scheme of things in the near future – since Al Qaeda would like to go further or to at least emulate the attack of 9/11. • Ideological motivation to affiliate organizations and independent operatives to launch attacks – the quality of patience with Al Qaeda seems to be fast eroding. • Major and minor attacks are always accompanied by statements commenting on the success of attacks from top leadership. Attacks in Iraq usually accompanied by video release of the event over the Internet. • Attacks against United States and allies ground forces in both Afghanistan and Iraq on the increase.²²⁹

²²⁸ Daniel L. Byman, “Al Qaeda as an Adversary: Do We Understand Our Enemy?” 155.

²²⁹ Bruce Riedel, “Al Qaeda Strikes Back,” 26. Also General Michael V. Hayden Director, CIA, during his statement for the record before the Senate Armed Services Committee on Nov 15, 2006 remarked that – “*The group [Al Qaeda] sees the United States as the main obstacle to realizing its vision of an extreme fundamentalist social and political order throughout the Muslim world. Although the group has suffered significant losses since 9/11, it is resilient and thoroughly dedicated to mounting new attacks on the US Homeland and our interests abroad.*” [On-line], available from https://www.cia.gov/news-information/speeches-testimony/2006/DCIA_SASC_Testimony.html; accessed May 30, 2007.

Cyberterrorism	<ul style="list-style-type: none"> No confirmed reports of any attacks and no perceived threat. 	<ul style="list-style-type: none"> Threats in this domain on the horizon – with independent groups forming alliances <i>on-line</i> – moving from ‘cyberplanning’ to ‘cyber attacks.’ <p>Greater emphasis on technological training to exploit this domain – release of on-line journals like <i>Technical Mujahid</i>, as well as basic training in the Jihadi curriculum.</p>
Internet as a Tool for Jihad	<ul style="list-style-type: none"> Utilization limited due to less proliferation and the ability to use other means. Exploitation of Internet as an important tool only just commenced prior to 9/11. 	<ul style="list-style-type: none"> Increased number of web-sites, larger number of operatives comfortable using the Internet due to its relative invisibility and its extensive proliferation world-wide provides the necessary connectivity. Important medium for propaganda, recruitment and training. Global communication and command and control infrastructure for Al Qaeda and its affiliates.

Table 4. Comparative Analysis of Al Qaeda Prior and Post 9/11 from Lenses of Information Operations.

D. SUMMARY

This chapter gave an overview of Al Qaeda — from its evolution to its present form, and how it has emerged as a globally networked threat that not only confronts directly the United States and its allies, but also is a major threat to other countries of the world through its affiliate organizations. The chapter also covers Al Qaeda’s adaptation in the Information Age to the paradigms of information operations and its proactive use of the constructs thereof to shape the information environment, to sustain its momentum and provide an impetus for its growth. The chapter also draws a comparative perspective on the utilization of information operations archetypes by Al Qaeda, prior to 9/11 and post 9/11, that

provides us with an understanding that the information domain is the dominant battleground of Al Qaeda.

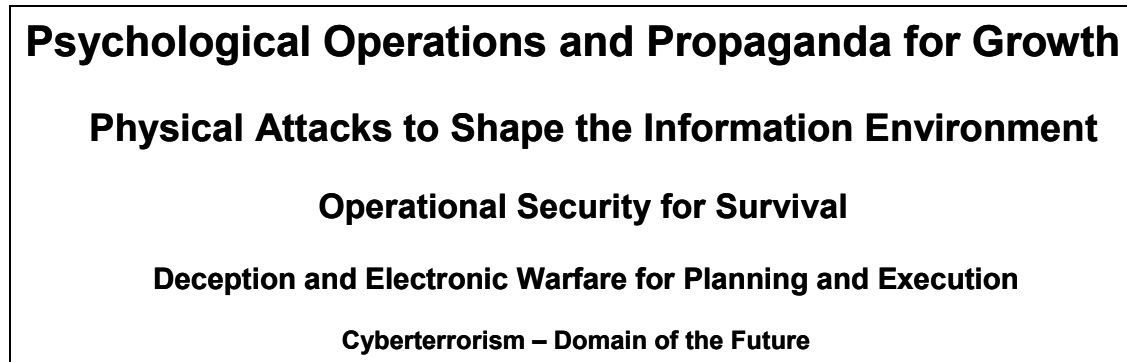


Figure 6. Al Qaeda Utilization of Elements of Information Operations.

Al Qaeda has adapted to using available technology and its existing social structure in an effort to be defined and acknowledged as a worldwide threat. The research in this chapter has enabled me to assess the elements of information operations that Al Qaeda utilizes to remain a force to be reckoned with, as well as to continuously progress on the path of growth, which is depicted in Figure 6 in decreasing order of its utility and strength. Psychological Operations and Propaganda in all its forms is the element that Al Qaeda utilizes the most, and is its strength. This is followed by deliberate physical attacks around the world on hapless civilians as well as pointed attacks on the United States and its allies' military infrastructure in Iraq and Afghanistan in order to keep the fire burning and to shape the overall information environment to its advantage. The use of Operational Security comes next. This is what enables it to stay invisible as well as enable it to undertake attacks that are difficult to predict and prevent. Deception and Electronic Warfare, although important to Al Qaeda for the planning and execution of its operations, do not constitute its major effort. Cyberterrorism may not be regarded as Al Qaeda's strength, but it definitely seems to be an area wherein efforts are being made to gain expertise. Finally, the Internet has become the greatest tool for Al Qaeda as it enables it to exploit

all the elements of information operations. There may be a case to carry out '*Blanking Out*'²³⁰ operations on the Internet to actually view the effect that its unavailability might have on Al Qaeda and other Islamist organizations in their operations and propaganda machinery.

²³⁰ Blanking Out operations is a term used to somehow undertake partial and region-specific censorship of the Internet or a complete shutdown for a specific duration of time. This may not be acceptable due to its unforeseen effect on the legitimate user community in that region, but nevertheless a simulated experimental environment could be set up to predict the effect on terrorist organizations that increasingly use the Internet for their propaganda and command and communication needs. Blanking Out operations in the larger context could also apply to Information Blockade and Information Imperialism as described by Libicki, but tailored to impact the info-sphere of terrorist organizations as an adversary.

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IV. BATTLE IN THE INFORMATION DOMAIN IN AFGHANISTAN

Afghanistan has a unique history and geographical location; it is the confluence of three different cultures that are manifestations of the three ancient civilizations of Mesopotamia, the Chinese, and the Indus Valley. Since it has been a land between these three diverse civilizations and an important junction point, it has from time immemorial been in a constant state of flux and this has given rise to regular foreign interventions and its diverse tribal culture. What has stayed constant is a distinct Islamic culture. Afghanistan has always been a country ravaged by war and, simply stated, war is seen as an acceptable way of life.²³¹

The events of 9/11 propelled Afghanistan into yet another conflict and with that came yet another foreign power. The reasons for the various foreign interventions have been quite diverse, but this time the United States and its allies launched military operations in Afghanistan as the opening shots in the Global War on Terror with objectives that focused on the destruction of the Al Qaeda infrastructure, the removal of the Taliban regime that supported Al Qaeda, and to provide stability to Afghanistan and its people.²³² With these objectives, the United States and its allies began the somewhat '*different kind of war*' as promised by President George Bush in his address to the Joint Session of Congress on September 20, 2001.²³³ The collective effort and resolve to embark on the Global War on Terror becomes amply clear from this statement of President Bush: "*We will direct every resource at our command -- every means of diplomacy, every tool of intelligence, every instrument of law enforcement, every financial influence, and every necessary weapon of war -- to the disruption*

²³¹ Ahmed Rashid, *Taliban: Militant Islam, Oil and Fundamentalism in Central Asia*.

²³² Donald Rumsfeld, "Briefing on Operation Enduring Freedom," Oct 7, 2001 [on-line], transcript available from <http://www.globalsecurity.org/military/library/news/2001/10/mil-011007-usia04.htm>; accessed May 29, 2007.

²³³ George W. Bush, Jr., President of the United States of America, "Address to the Joint Session of Congress," Sep 20, 2001 [on-line], transcript available from <http://www.globalsecurity.org/military/library/news/2001/09/mil-010920-usia01.htm>; accessed May 29, 2007.

and defeat of the global terror network.” Six years hence, the political resolve and military operations do not appear too successful, the coalition looks increasingly scattered, doubts about the destruction of terror network(s) in the foreseeable future have become stronger, the Taliban and Al Qaeda seem to be slowly but surely re-grouping, much of the top Al Qaeda leadership is still at large, the war appears to be unending, the stability in Afghanistan still looks distant, and the justification to embark on this all-encompassing war on terror is falling apart. The successes as elucidated in the document *9/11 Five Years Later: Successes and Challenges* are creditable, but the challenges mentioned appear formidable, too.²³⁴ The successes in the physical domain have not been matched in the information domain and the mastery of the information domain still appears to be eluding the United States and its allies.

This chapter analyzes the operations undertaken in Afghanistan by comparing the actions taken by the United States and its allies in the spectrum of information operations, with that of their adversary, using Libicki’s *Mosaic of Forms* concept, and thereafter describing macro level actions that influence the information environment.

A. UTILIZATION OF INFORMATION OPERATIONS BY THE UNITED STATES AND ITS ALLIES

The initial support for the United States undertaking operations against the perpetrators of 9/11 was overwhelming, both in terms of public support in the United States as well as the world community in general, yet few of the Muslim nations were skeptical about the way United States would undertake its retaliation. The activity in the information environment saw a tremendous increase, with the attacks of 9/11 and its aftermath as they were beamed across the world through the media as well as through the Internet. Leaders all over the world were trying to gauge the response of the United States and defining their options to either support the intended initiative or to stay away. The Islamist terrorist organizations, too, were wary of the fury and the scale of response.

²³⁴ United States of America, “9/11 Five Years Later: Successes and Challenges.”

People all over the world, especially in Muslim nations, drew varied reactions. The United States leadership started mobilizing its efforts on all fronts — political, diplomatic, and military — to launch their offensive against the perpetrators of the 9/11 attacks. In a very short time, Al Qaeda and the Taliban regime in Afghanistan were identified as the targets, and a massive diplomatic and political effort was begun in order to undertake military operations in Afghanistan.

The United States and its allies commenced Operation Enduring Freedom on October 7, 2001, with air strikes in Afghanistan, duly modulated by the Central Intelligence Agency teams on the ground, and in due course, the Special Operations Forces, too. In an extremely short span of time — with a few special operations teams and the support of anti-Taliban forces in Afghanistan, and with well orchestrated precision aerial strikes — the Taliban was routed, the Al Qaeda infrastructure in Afghanistan destroyed, Al Qaeda members scattered, and a provisional government established in Kabul. The initial response of the United States and its allies to the 9/11 attacks was fairly impressive, but almost six years down the line, the initial successes are long forgotten and the visible successes in the physical domain are accompanied by an adverse picture in the information domain. The environment on the ground for the United States and its allies also changed considerably from *‘the hunter to they became the hunted.’* The support that the United States had on the eve of 9/11 began to dwindle. The rhetoric heard from the president of the United States, in many a forum, started to seem presumptuous:

*When I committed U.S. forces to this battle, I had every confidence that they would be up to the task. And they have proven me right. The Taliban and the terrorists set out to dominate a country and intimidate the world. Today, from their caves, it's all looking a little different. And no cave is deep enough to escape the patient justice of the United States of America..... Our military has a new and essential mission. For states that support terror, it's not enough that the consequences be costly — they must be devastating.*²³⁵

²³⁵ George W. Bush, Jr., President of the United States of America, “President Speaks on War Effort to Citadel Cadets,” Dec 11, 2001 [on-line], available from <http://www.whitehouse.gov/news/releases/2001/12/20011211-6.html>, accessed May 26, 2007.

Thus began a change in the strategic information environment and the initial success in the information domain slowly turned around. In the succeeding paragraphs, the operations in the information domain are highlighted through the prism of Libicki's notion that information warfare consists of many varied dimensions — that it is a Mosaic of Forms.

1. Organizational Infrastructure in Support of OEF

The United States Central Command (CENTCOM) responsible for South Asia and the Middle East regions became the nominated headquarters to plan and execute the military operations in Afghanistan.²³⁶ The operations in Afghanistan were deemed to be unconventional and different. The CIA, too, played its part in formulating a plan to insert its teams into Afghanistan and build up the indigenous anti-Taliban forces and use their local expertise with due incentives in terms of military hardware, close air support, and requisite financial support to begin operations against the Taliban and Al Qaeda.²³⁷ The equally important effort of building coalition support from countries around the world, and in particular countries surrounding Afghanistan, began in coordination with CENTCOM.²³⁸ The unconventionality in planning the initial phase of operations stems from the fact that there was an overarching necessity to undertake operations quickly, and hence the cumbersome support structure and command and control hierarchy associated with operations undertaken by the United States in the past, had to be done away with. In addition, there was a lack of any significant military targets, in terms of military infrastructure in Afghanistan and hence the *classical* United States air pounding was negated. Although, Hy Rothstein describes the initial phase of operations as, “*Up to this point [December 2001] for the U.S military, the war was appropriately conventional. Attrition warfare, capitalizing on superior firepower, was used against an enemy*

²³⁶ Hy Rothstein, *Afghanistan and the Trouble Future of Unconventional Warfare*, (Annapolis, Maryland: Naval Institute Press, 2006), 4.

²³⁷ Gary C. Schroen, *First In* (New York: Ballantine Books, 2005), 11-17.

²³⁸ Lieutenant General Michael DeLong, USMC (Retired) and Noah Lukeman, *Inside CENTCOM: The Unvarnished Truth about the Wars in Afghanistan and Iraq* (Washington D.C.: Regnery Publishing Inc, 2004), 27-32.

that presented lucrative array of targets..... Special operations forces were used, but the military war plan remained firmly planted at the attrition end of the spectrum."²³⁹ Similar views are forthcoming from Stephen Biddle; "*The Afghan campaign of last fall and winter [2001-02] was actually much closer to a typical 20th century mid-intensity conflict, albeit one with unusually heavy fire support from one side.*"²⁴⁰

In due course, the defensive lines adopted by the Taliban and Al Qaeda gave way to a more dispersed and invisible force structure, and their operations turned increasingly irregular. For the United States and its allies, whatever unconventionality was utilized in the conduct of initial operations soon gave way to larger, heavier, and concentrated forces, establishment of a rigid hierarchy, explicit command and control directives, and a requirement for special authorization for conduct of operations. The corresponding decision loop increased with a tightening of the command and control setup; operations began to be conducted more in the open and in the glare of the adversary, with the lack of appropriate human intelligence and under observation of the adversary, the operations became more predictable and reactive, and the momentum shifted from an offensive mode to a defensive mode.²⁴¹

The *anti-head* and *anti-neck* operations described by Libicki as part of the Command and Control warfare became more and more difficult as the adversary adapted from a conventional hierarchical organizational structure with little emphasis on a networked force, into a more networked and distributed form. The necessary adaptation of the United States and its allied forces to deal with this change is not visible. The command and control structure changed from *loosely controlled* to one that involved *tight controls*.²⁴² Benjamin Lambeth of the RAND

²³⁹ Hy Rothstein, *Afghanistan and the Troubled Future of Unconventional Warfare*, 12-13.

²⁴⁰ Stephen Biddle, "Afghanistan and the Future of Warfare: Implications for Army and Defense Policy," Strategic Studies Institute, U.S. Army War College, Carlisle Barracks, Pennsylvania, Nov 2002.

²⁴¹ Hy Rothstein, *Afghanistan and the Troubled Future of Unconventional Warfare*, 100-102, 108. Also see Stephen Biddle's "Afghanistan and the Future of Warfare: Implications for Army and Defense Policy."

²⁴² Hy Rothstein, *Afghanistan and the Troubled Future of Unconventional Warfare*, 108-114.

Corporation also mentions that OEF saw not only centralized planning, but also centralized execution, starting from the highest levels of the government to the engaged combatants at the point of contact with the enemy. This he attributes to the greatly expanded global Intelligence Surveillance and Reconnaissance (ISR) and communications connectivity that increase the situational awareness manifold, but also enable the 'command at a distance' syndrome.²⁴³ The idea of small, well trained and motivated teams, with advanced technology and fire power as a backup, that are sufficiently autonomous in nature, may be the correct combination to apply in this changed scenario in order to conduct the war-fighting aspect.

By 2006, a North Atlantic Treaty Organization (NATO) International Security Assistance Force (ISAF) began replacing the United States troops in Afghanistan. ISAF is mandated under Chapter VII of the United Nations (UN) Charter (Peace Enforcing) by UN Security Resolutions 1386, 1413, 1444, 1510, 1563, 1623, 1659 and 1707, and has the responsibility for the whole of Afghanistan, with its primary role being assisting the Islamic Republic of Afghanistan to provide a safe and secure environment within Kabul and its surrounding areas, which will assist in the reconstruction of Afghanistan.²⁴⁴ The formation of a coalition force of this kind, though quite creditable, the exclusivity of only NATO member nations being part of this coalition gives it less credibility in the eyes of other countries. Along with the problems associated with a cumbersome conventional force as part of ISAF, the capability of such a coalition of nations, wherein many of the nations that are part of this coalition have never been exposed to such an irregular adversary, and are seen as so far away from the culture and the people of Afghanistan, is a bit circumspect. Anthony Cordesman rightly remarked in his testimony to the Senate Foreign Relations

²⁴³ Benjamin S. Lambeth, *Air Power Against Terror: America's Conduct of Operation Enduring Freedom*, RAND Corporation, 2005. 324-330.

²⁴⁴ International Security Assistance Force Website [on-line], available from <http://www.nato.int/isaf/>; accessed May 30, 2007.

Committee that “*There is no alternative to Internationalism.*”²⁴⁵ This may be the right time to give way to a United Nations-mandated force, and with troops under the aegis of the United Nations, to assist and enlarge the existing coalition to bring about peace and stability in Afghanistan with an emphasis on nation building. RAND Corporation has also conducted a number of studies on nation building and counterinsurgencies, and among the principal conclusions that can be drawn from these historical surveys are, the extreme difficulty of putting together broken societies without the support of neighboring states, and the near impossibility of suppressing well established insurgencies that enjoy external support and neighboring sanctuary.²⁴⁶ These conditions exist in Afghanistan; neighbors like Iran, India and the central Asian republics, are not involved with nation building in any significant way and Pakistan provides the necessary external support to fuel the ongoing insurgency in Afghanistan.

Afghanistan's future depends heavily on the international community's willingness to continue delivering concrete resources to the Afghan Government. It depends equally on international willingness to help protect the Afghan Government against the Taliban and other extremists who are waging a bloody insurgency in the south and east of the country.

— General Michael V. Hayden, Director, CIA. Statement for the Record before the Senate Armed Services Committee, Nov 15, 2006

²⁴⁵ Anthony H. Cordesman, “The Post Conflict Lessons of Iraq and Afghanistan,” Testimony to the Senate Foreign Relations Committee, May 19, 2004 [on-line]; available from <http://www.senate.gov/~foreign/testimony/2004/CordesmanTestimony040519.pdf>; accessed May 30, 2007.

²⁴⁶ James Dobbins, “Ending Afghanistan’s Civil War,” Testimony presented before the House Armed Services Committee on Jan 30, 2007.

2. Impact of Intelligence on Operations

Fusing the ability to see and strike through interconnected systems, while at the same time reducing the vulnerability of operators, portends momentous changes in the nature of warfare. On the other hand, the complex task of extracting the Taliban and al-Qa'ida forces from difficult terrain and cave hideouts illustrates how much farther we need to progress in our ability to fuse knowledge, decisions, and action into a seamless combat process.

General Richard B. Myers, Chairman of the Joint Chiefs of Staff
Joint Forces Quarterly, Autumn/Winter 2001-02

Intelligence is by far one of the more important aspects of the war on terror. The technical intelligence capability of the United States is undisputed, but what it seems to be lacking is the 'up close actionable intelligence' that is obtained through human intelligence channels. In the early days of OEF, the United States and its allies had the technical intelligence infrastructure in place to support the operations in Afghanistan, but there was a dearth of human intelligence operators on the ground to undertake close surveillance. The initial group of CIA operators and SOF teams that infiltrated into Afghanistan in September-October 2001 was a step toward overcoming this deficiency. One of the important steps was the establishment of a Joint Intelligence Cell by the CIA teams in September 2001. This cell collated all the information coming from direct observation of enemy activities at the Northern Alliance front lines, or intercepted enemy radio communications, and then all the information was analyzed and shared with other CIA teams and, within a period of one month, generated some 400 intelligence reports.²⁴⁷ This flow of intelligence and its direct application on operations like targeting Al Qaeda and the Taliban resulted initially in an exponential increase in positive outcomes. This is a classic example of the growth curve of Intelligence Based Warfare as described in Chapter II.²⁴⁸ The stagnation of the outcomes, even with increased intelligence capability, as shown

²⁴⁷ Gary C. Schroen, "First In," 90-91, 112.

²⁴⁸ See Chapter II, 53-54.

in Figure 3, could also be attributed to an increase in the distributed and networked nature of the adversary that emerged over the course of time.

The intelligence reports generated during Operation Anaconda during February-March 2002 were also widely off the mark. At one time, the estimated numbers of Al Qaeda and Taliban in the Shah-i-Kot valley was 200, but the estimated numbers gradually increased to around 1000 enemy fighters at the launch of the operation, and for this reason, the necessary intelligence to support operations against a committed adversary was found deficient.²⁴⁹ The intelligence and planning for the operation was also not able to really visualize the resilience and fighting skills of Al Qaeda and the Taliban. Their 'defense in depth' along with the motivation of the terrorists to fight till the end was also not assessed correctly by the intelligence or planning communities. This phenomenon must be kept in mind in the wider context of the global war on terror.

The use of technically superior intelligence gathering apparatus like the Predator Unmanned Aerial Vehicles (UAVs) to undertake surveillance as well as strike targeting missions has been well demonstrated, but the importance of human intelligence in the layers of people amongst whom terrorists hide in situations like this cannot be over-emphasized.²⁵⁰ The *Jigsaw Puzzle Paradigm*, as introduced by David Sloggett, also has human intelligence as an enabling component.²⁵¹ Initiatives like the setting up of a Joint Intelligence Operations Center by the ISAF with the integration of local and regional component players

²⁴⁹ United States Air Force, *Operation Anaconda: An Air Power Perspective*, Feb 7, 2005 [on-line]; available from http://www.milintelligence.com/Operation_Anaconda_AF_report.pdf, accessed May 30, 2007. Also see Karen Walker, "Anaconda's Lesson: People, Not ISR Gizmos, Win Battles" [on-line], available from <http://www.dnmediagroup.com/promos/conferences/0505coverage/856509.html>, accessed May 30, 2007. Also see Charles H. Briscoe, et al., *Weapons of Choice: U.S. Army Special Operations Forces in Afghanistan*, Combat Studies Institute Press, Fort Leavenworth, Kansas, 2003, 281-284.

²⁵⁰ Hy Rothstein, *Afghanistan and the Troubled Future of Unconventional Warfare*, 174.

²⁵¹ David Sloggett, "Intelligence Support to Contemporary Information Operations," *IO Sphere*, The Professional Journal of Joint Information Operations, Joint Information Operations Warfare Command, Spring 2007, 21-22.

is timely to bring about a collaborative effort in intelligence collection and direct actions against the ongoing insurgency in Afghanistan.²⁵²

3. Electronic Warfare

Neil Munro describes EW as that form of warfare which *is intended to shut the ears, stop the voice, close the eyes and freeze the nervous system of enemy soldiers. Deaf, dumb, blind, and paralyzed soldiers do not live long in battle*²⁵³. EW has been seen as a force multiplier in conventional war fighting wherein a greater emphasis is placed on airborne EW assets that accompany strike aircraft missions by carrying out the suppression of enemy air defense (SEAD) operations. The fact that the United States and its allies have not been appropriately tested against a formidable adversary for a long time has led to a shifting of priorities away from the EW aspect in times of conflict.²⁵⁴ The case in OEF was similar in that there was hardly any worthwhile air defense infrastructure of the Taliban that could be targeted through these assets. SEAD missions, although important for achieving air superiority, were not necessary during OEF. The EW aspect in OEF was highlighted more in ground operations and the resource crunch in ground-based EW assets was evident.²⁵⁵ In the initial phase of OEF, EW operations were conducted against the limited Taliban air defense assets as well as a depleted command and control infrastructure by using the EC-130H Compass Call aircraft. These aircraft conducted barrage jamming of Afghan command and control frequencies and EA-6B Prowlers were used to take out the air defense radars by accompanying the strike aircrafts.²⁵⁶

²⁵² Stacie Shafran, "Joint Intelligence Operations Center Opens in Kabul," Jan 29, 2007 [on-line], available from <http://www.af.mil/news/story.asp?id=123039140>, accessed May 31, 2007.

²⁵³ Neil Munro, *The Quick and the Dead: Electronic Combat and Modern Warfare* (New York: San Martin's Press, 1991), 1.

²⁵⁴ United States General Accounting Office, "Electronic Warfare: Comprehensive Strategy Still Needed for Suppressing Enemy Air Defenses," GAO-03-51, Nov 2002.

²⁵⁵ Joseph L. Cox, "Information Operations in Operation Enduring Freedom and Iraqi Freedom – What Went Wrong?" School of Advanced Military Studies, United States Army and General Staff College, Fort Leavenworth, Kansas, 2005-06, 29 [on-line], available from <http://www.fas.org/irp/eprint/cox.pdf>, accessed May 30, 2007.

²⁵⁶ Joseph L. Cox, "Information Operations in Operation Enduring Freedom and Iraqi Freedom – What Went Wrong?" 57.

The major utilization of ground-based EW assets in Afghanistan is for anti-IED operations and other asymmetric threats. The core aspects of EW have been neglected by the U.S. Army, and in an environment that has terrorists using such novel measures for attacking coalition forces, they warrant a re-look into all aspects of EW including adopting new technologies and training.²⁵⁷ The EW assets were also used during the presidential elections in October 2004 and the National Assembly and Provincial Council elections held in September 2005, for jamming communications and remotely controlled IEDs and thereby providing a secure environment.²⁵⁸

Electronic Search measures, in terms of tactical signal intelligence (SIGINT) missions, is an important aspect wherein electronic signatures of adversary communications are acquired and contribute to overall situational awareness through their ability to detect, identify, locate, and track selected emitters²⁵⁹. The Prophet land-based system is being extensively used in OEF.²⁶⁰ The importance of the deployment of these systems at the tactical level allows commanders to monitor the communications between the insurgents; the only problem foreseen is the availability of an adequate number of linguists for the Dari and Pashto languages, without which, time may be lost due to analysis by out of area experts. There will always be a debate on whether to keep the insurgent emitter active to obtain continuous flow of SIGINT or to target it electronically or through physical means to undertake its destruction; this decision may be taken by the commander in the field. A grid-type deployment of these assets in the entire battlefield, with communication links to operational

²⁵⁷ Joseph R. Pitts, "Making Up For Lost Time: The Army is Stepping up to fill a Critical Gap in EW Training," Electronic Warfare Working Group, Issue Brief #22, Apr 24, 2007 [on-line], available from <http://www.house.gov/pitts/initiatives/ew/Library/Briefs/brief22.htm>, accessed May 31, 2007.

²⁵⁸ Joseph L. Cox, "Information Operations in Operation Enduring Freedom and Iraqi Freedom – What Went Wrong?" 61.

²⁵⁹ Neil Munro, in his book *The Quick and the Dead* describes Signals Intelligence as a non combat activity, and is of the opinion that small bits of information obtained through intercepted transmissions of the enemy *can be put together much as small stones are combined in a mosaic to form a wonderful picture*.

²⁶⁰ Maryann Lawlor, "Signal Intelligence System Uncovers Enemy Sites," *Signal Magazine*, Oct 2002 [on-line], available from http://www.afcea.org/signal/articles/templates/SIGNAL_Article_Template.asp?articleid=324&zoneid=31, accessed May 31, 2007.

centers as well as to supporting commanders, may provide the timely intelligence to bring about fire power or the employment of dedicated small teams on opportunistic targets that come up in a counter-insurgency scenario.

4. Psychological Operations

The coordination of the PSYOP effort as part of the OEF began with the establishment of the Joint Psychological Operations Task Force (JPOTF) located at the U.S. CENTCOM under the theatre commander's operational control.²⁶¹ The initial emphasis was on the production of anti-Taliban and anti-Al Qaeda material that would persuade the Afghan people to reject their legitimacy. In due course, a PSYOPS plan was formulated with three important objectives. The first was targeted at the Taliban and Al Qaeda and amplified the capability of the coalition forces and the futility of a continued struggle, given that the leadership of the Taliban and Al Qaeda deserted their cadres and went into hiding. The second was targeted at the Afghan populace to provide assistance to overthrow the Taliban regimes and information that would lead to the capture of the Taliban and Al Qaeda leaders. The third was also targeted at the Afghan populace and gave out information regarding the impending humanitarian effort. Specific themes were formulated after due diligence and guidance from experts in the field in the continental United States, and in the later part, through the academic faculty at the University of Kabul.

In spite of the JPOTF being under the theatre commander's operational control, there was a 'long' chain of approval processes for executing PSYOPS tasks that involved the military officials in the office of the Joint Chiefs of Staff and the Office of Secretary of Defense. The entire PSYOPS plan required policy-level approval from the Assistant Secretary for Special Operations and Low Intensity Conflict (ASD-SO/LIC) and the Under Secretary of Defense for Policy (USD-P). Once the plan was approved—each product prototype had to be

²⁶¹ Charles H. Briscoe, et al., *Weapons of Choice: U.S. Army Special Operations Forces in Afghanistan*, Combat Studies Institute Press, Fort Leavenworth, Kansas, 2003, 47-50, 62-63. This document provides a detailed view of how PSYOPS was considered and implemented in the overall war-fighting plans for OEF and is referred to extensively in this part of the research.

approved by commander CENTCOM—then the specific product was again sent to ASD-SO/LIC for policy review and approval of the product for dissemination. This process appears to be too bureaucratic, cumbersome, and would surely imply associated delays in dissemination. The fast changing nature of the information environment would imply that from the time the product was conceived and finally approved for dissemination, it is highly likely that it could lose its informational impact. According to Rothstein, the overall approach to PSYOPS lacked cohesiveness and did not consider the changing nature of the information environment.²⁶² The other version could be that there are some themes that would have a universal appeal and an infinite time-line, hence, for those to be planned and executed from the JPOTF at Tampa, Florida makes sense. But more operational and tactical PSYOPS programs need to have a bottom-up approach from conceptualization to dissemination.

The PSYOPS resources included the EC-130 Commando Solo aircraft for broadcasting audio and video messages, aircrafts for dropping leaflets and other material, static printing presses as part of the Psychological Operations Groups, a Deployable Print Production Center (DPPC), and a Modular Print System (MPS). At the organizational level there was the JPOTF, POGs, Psychological Operations Battalions (POBs), Product Development Detachments (PDDs), Tactical PSYOP Detachments, and Special Operations Media Systems—Broadcast (SOMS-B) Teams. In the present composition of the ISAF along with the United States PSYOPS troops, there are the troops from the United Kingdom's 15 (UK) POG for assisting the Afghan government in security and reconstruction activities and for training the personnel of the Afghan security forces.²⁶³

From Libicki's perspective, the four categories of PSYWAR—against the national will, against the opposing commanders, against the troops and cultural conflict—has an interesting connotation with regards to the PSYOPS during

²⁶² Hy Rothstein, *Afghanistan and the Troubled Future of Unconventional Warfare*, 117.

²⁶³ 15(UK) Psychological Group Website [on-line], available from http://www.army.mod.uk/15psyops/_afghanistan.htm, accessed May 31, 2007.

OEF. Firstly, PSYWAR against the national will does not exist in this scenario where the Taliban regime was in many ways not considered a popular choice amongst the people of Afghanistan, and so there was no major support to the regime from the people. The resentment of the Taliban by the general populace meant that the PSYOPS aimed at the national will should have been more “cohesive” rather than “divisive” in context. Secondly, enemy commanders such as Mullah Omar, Osama Bin Laden, Ayman Zawahiri and others are too radicalized for PSYOPS to have any worthwhile effect. Thirdly, the PSYOPS on troops did have its specific situation-based impact, but the troops also need to be categorized into highly radicalized and moderately radicalized. This will enable better planning and effort utilization. Fourthly, the cultural conflict deals with the people of Afghanistan and this is by far the most important ingredient of the PSYOPS spectrum there. The ability of the people of Afghanistan to accept such a regime change, brought about again through external intervention, acceptance of the democratically elected government, and the belief that the people are central to the democratic process are values that need to be targeted over the long term and that can only be achieved through progressive and visible developments on the ground. There is therefore a need to pursue a strategy of *information isolation* with regard the national will, leaders, and troops, and focus more on the people of Afghanistan.

Information isolation would imply refraining from targeting the terrorist leaders and troops through redundant PSYOPS efforts and thereby curbing the assistance that we provide to their publicity and propaganda campaigns. At the strategic level, this could involve a complete shift in focus from rhetorical speeches by world leaders against the terrorist leadership to addressing the general populace in Afghanistan, highlighting the efforts of the coalition forces, and encouragement of their adopted path of democracy. The “reactive syndrome” of acknowledging the messages of terrorist leadership needs to be curbed. This could be achieved by modulating the world media from highlighting such messages from terrorist leadership to more positive images and commentaries that emphasize nation building, coalition cooperation, and overall

world support. This approach needs to factor in the 'independence of media' and its associated repercussions that may be seen as unnecessary modulation or as interference in media activities. *Information Isolation* could also take the form of regulated and specifically created *Information Deficiency* that would assist in curbing the value of propaganda achieved through terrorist activities and propagated using the world media.

5. Hacker Warfare, Cyber Warfare and Economic Information Warfare

These three elements of information warfare, as highlighted by Libicki, hardly have any applicability in the context of OEF, and may be considered against a nation state adversary with an adequate index of development. Hacker warfare relates to attacks directed toward military computer systems, which are non-existent in the context of the Taliban and Al Qaeda. What could be undertaken is some Form of information terrorism and semantic attacks as part of hacker warfare, wherein isolated computer systems and laptops, being used by terrorists on the Internet may be identified, and surgical information gathering attacks, as well as corruption of data, could be undertaken. Another form of exploitation is financial transactions undertaken by the terrorists through the use of the Internet wherein the data flow could be corrupted or modified, although with transaction systems like *Hawala*, the success of such operations become debatable. Libicki's *Mosaic of Forms* does not apply, in any of its categories to the context of OEF, and also does not include many other important facets of the information environment. For this reason, a broader approach of information operations needs to be considered in the context of the adversaries being terrorist organizations, and in particular, for the form of insurgency that is visible in Afghanistan.

6. Civil Military Operations and Nation Building

CMO is an important element of information operations that provides an avenue that affects the overall information environment. The necessity of

directing humanitarian assistance toward the people of Afghanistan was acknowledged before the launch of OEF when President Bush, during his address to the State Department employees on October 4, 2001, stated that

....America will contribute an additional \$320 million in humanitarian assistance for Afghans for more food, more medicine, to help the innocent people of Afghanistan deal with the coming winter. This is our way of saying that while we firmly and strongly oppose the Taliban regime, we are friends of the Afghan people.²⁶⁴

Such an announcement would clearly involve the active coordination of military forces as part of OEF, with various civilian infrastructures that existed on the ground, or which were planned for with the progression of OEF. The utilization of such operations was clearly understood by the United States and its allies during the preparatory stage of OEF, but the visualization of the magnanimity of the task was not foreseen, nor was the quantum of involvement of coalition forces in this activity. This is further validated when the leading elements of the 96th Civil Affairs Battalion (CAB), after the initial reconnaissance in Pakistan in the second week of October 2001, recommended that there was no need to establish a Civil Military Operations Center (CMOC) for coordination of humanitarian assistance into Afghanistan, and in hindsight, requested a Civil Affairs Team that reached Pakistan by the end of October 2001.²⁶⁵ The importance of Civil Affairs in the context of the global war on terror is also indicated by the fact that the United States has activated five reserve CABs and one Civil Affairs Brigade since 9/11.²⁶⁶

Elements of 96th CAB were at the forefront for establishing a positive climate among the population of Afghanistan and a Coalition Humanitarian Liaison Cell (CHLC) was established in Mazar-e-Sharif on November 15, 2001. Shortly thereafter, a Combined Joint Civil-Military Operations Task Force

²⁶⁴ President George Bush's address to the State Department Employees on Oct 4, 2001. Transcript available from <http://www.whitehouse.gov/news/releases/2001/10/20011004.html>, accessed May 31, 2007.

²⁶⁵ Charles H. Briscoe, et al., *Weapons of Choice: U.S. Army Special Operations Forces in Afghanistan*, Combat Studies Institute Press, Fort Leavenworth, Kansas, 2003, 60-61.

²⁶⁶ United States Army Website, available from <http://www.army.mil/cmhp/lineage/branches/civaf/>, accessed May 31, 2007.

(CJCMOTF) was created to coordinate and manage the entire operation that sent a CAT team to Bagram to establish a CHLC. CMOC-North and CMOC-South were also created at Karshi Karnabad, Uzbekistan, and Kabul respectively.²⁶⁷ The civil affairs personnel were involved in wide and varied tasks, from coordinating the relief effort between United Nations aid agencies, Non Government Organizations (NGOs), private charities, management and funding of civilian infrastructure projects, establishment of medical facilities, schools, and emergency civilian casualty evacuations, etc. The contribution of such activities toward moderating a hostile information environment is immense.

After the initial objectives of OEF were met, the OEF entered the phase of stability operations. Important fallout of this phase was the announcement of the formation of Joint Regional Teams (JRTs), and the first public briefing was given at the U.S. embassy in Kabul on November 21, 2002.²⁶⁸ The concept of JRTs was introduced as consisting of mobile CATs, CMOCs, and a security force, with the role of coordinating the reconstruction process, identification of reconstruction projects, conducting village assessments, and liaising with regional commanders. The teams were proposed to be created in 10 Afghan cities. In due course, the JRTs were renamed the Provincial Reconstruction Teams (PRTs) with an assigned role to work with the central Afghan government and regional authorities, and with the United Nations Assistance Mission to Afghanistan (UNAMA) to assist in securing the conditions for economic, civic, and other programs. The teams are led by coalition forces and have a multi-national and inter-agency composition with personnel from the military, engineers, medical, State department, and USAID representatives working in close coordination with the Afghan government, UNAMA, NGOs, and other international agencies.²⁶⁹

²⁶⁷ Charles H. Briscoe, et al., *Weapons of Choice: U.S. Army Special Operations Forces in Afghanistan*, Combat Studies Institute Press, Fort Leavenworth, Kansas, 2003, 183-185.

²⁶⁸ Barbara J. Stapleton, "A British Agencies Afghanistan group Briefing Paper on Development of Joint Regional Teams in Afghanistan," Jan 2003 [on-line], available from http://www.baag.uk.org/downloads/reports/barbara_JRT_report.pdf, accessed May 31, 2007.

²⁶⁹ Peter W. Rodham, "Post Conflict Afghanistan," testimony to the Senate Committee on Foreign Relations, Feb 12, 2003 [on-line], available from <http://www.senate.gov/~foreign/testimony/2003/RodmanTestimony030212.pdf>, accessed May 31, 2007.

The initial execution plan for the establishment of JRTs / PRTs was quite vague and there have been many apprehensions about the success of such an endeavor.²⁷⁰ With the subsequent formation of ISAF and its expanding role in Afghanistan, the PRTs have moved under the command of the ISAF and have taken a multi-national and multi-agency shape.²⁷¹ Notwithstanding problems in the evolution of PRTs to what they are today, the idea does make sense, and with due emphasis and adequate priority could really shape the information environment in Afghanistan in a positive manner. A RAND Corporation study on the aid provided to Afghanistan mentions that *“In this war unlike any other the United States has been engaged in, the potential for failure flows not only from poorly executed military plans, but also from an inability to see assistance as a part of the continuum from combat to post-conflict development and reconstruction.”*²⁷² Further expanding the role, charter, and composition of PRTs to include the macro task of nation-building is bound to provide the necessary robustness to this program and assist in *winning the hearts and minds* of the people of Afghanistan — but surely it will test the patience as well as the resilience of the ISAF.

B. INFORMATION OPERATIONS FROM THE PERSPECTIVE OF THE TALIBAN

Afghanistan has been an incubator of terrorism for a long time now. The Mujahideen-led Jihad against the Soviet occupation was the time when religious Islamic fundamentalism took strong roots, and their final withdrawal from Afghanistan became the motivation and a positive example for other like-minded

²⁷⁰ See Barbara J. Stapleton, “A British Agencies Afghanistan group Briefing Paper on Development of Joint Regional Teams in Afghanistan.” Also see Michael J. McNerney, “Stabilization and Reconstruction in Afghanistan: Are PRTs a Model or a Muddle?” *Parameters*, Winter 2005-06, 32-46 [on-line], available from <http://www.carlisle.army.mil/usawc/Parameters/05winter/mcnerney.htm>, accessed May 31, 2007.

²⁷¹ General James L. Jones, USMC, Supreme Allied Commander Europe, Statement before the Senate Foreign Relations Committee, Sep 21, 2006 [on-line], available from <http://www.senate.gov/~foreign/testimony/2006/JonesTestimony060921.pdf>, accessed May 31, 2007.

²⁷² Olga Oliker et al., “Aid During Conflict: Interaction Between Military and Civilian Assistance Providers in Afghanistan, Sep 2001–Jun 2002,” RAND Corporation [on-line], available from http://www.rand.org/pubs/monographs/2004/RAND_MG212.pdf, accessed May 31, 2007.

terrorist organizations to emulate. It also gave a number of nation states the confidence to aggressively adopt the idea of covert sponsorship to a band of religious fanatics and utilize them as an additional force in its arsenal.²⁷³ The initial reaction to the success of the Taliban in Afghanistan was quite different from what it was in 2001; people of Afghanistan were enthusiastic about the emergence of the Taliban, as they assumed that it would be possible to get rid of the 'warlordism,' that the strict *Sharia* law would assist in rooting out corruption, and that finally there would be some sort of stability.²⁷⁴

The situation prior to 9/11 was a little different; the Taliban was not able to live up to the aspirations of the people of Afghanistan, the country was as unstable as in the past, atrocities of the Taliban were more brutal, internationally the Taliban regime was isolated, Osama bin Laden was given shelter by the regime, and religious extremism increased in a big way. As an aftermath to 9/11, the Taliban regime knew of the retaliation that was forthcoming and had a consistent view of not handing Osama bin Laden to the United States without any proof.²⁷⁵ The overall information environment was negative from the perspective of Taliban and Al Qaeda; there was overwhelming support for the United States' retaliation against Al Qaeda and the Taliban regime, including a military action in Afghanistan both domestically²⁷⁶ as well as internationally. But in a span of six years there appears to be a turn around in the information environment, not because of Taliban and Al Qaeda emergence, but more due to the inability of the coalition forces in Afghanistan to successfully execute their strategies on the

²⁷³ Vali Nasr, "Pakistan: Balancing Reform and Counterterrorism," testimony to the Senate Foreign Relations Committee, Jul 14, 2004 [on-line], available from <http://foreign.senate.gov/testimony/2004/NasrTestimony040714.pdf>, accessed Jun 1, 2007.

²⁷⁴ Kawun Kakkar, "An Introduction of the Taliban," *Institute of Afghan Studies*, Fall 2000 [on-line], available from http://www.institute-for-afghan-studies.org/AFGHAN%20CONFLICT/TALIBAN/intro_kakar.htm, accessed Jun 1, 2007.

²⁷⁵ "Taliban Won't Turn Over Bin Laden," *CBS News*, Sep 21, 2001 [on-line], available from <http://www.cbsnews.com/stories/2001/09/11/world/main310852.shtml>, accessed Jun 1, 2007.

²⁷⁶ PEW Polls, "Military Action A Higher Priority Than Homeland Defense," The Pew Research Center, Sep 21, 2001 [on-line], available from <http://people-press.org/reports/display.php3?ReportID=2>, accessed Jun 01, 2007. Also see TIME/CNN Poll, "Americans Give Bush a Big Thumbs-Up," Sep 28, 2001 [on-line], available from <http://www.time.com/time/nation/article/0,8599,176815,00.html>, accessed Jun 1, 2007.

ground. Nevertheless, Taliban and Al Qaeda have been able to consolidate their positions and have pushed Afghanistan into an uncertain future once again.

1. Organizational Adaptation by the Taliban

The initial resistance offered by the Taliban and Al Qaeda to the air campaign of the United States at the beginning of OEF was fairly successful. The Taliban had adopted some form of defensive positions that they could initially hold mainly due to the inability of the air strikes to successfully hit their positions or support the offensive of the anti-Taliban forces. In due course, with mapping of the Taliban frontline positions by the special operations teams, the air campaign began to cause heavy damage to these positions and gradually the rank and file of the Taliban began to disintegrate. *In this phase the Taliban unwisely allowed the United States to apply an asymmetric advantage against its inferior army.*²⁷⁷ The organizational cohesiveness of the Taliban and Al Qaeda was completely fragmented by the end of December 2001, and thereafter a classical withdrawal strategy was executed. The initial emphasis of the Taliban to hold defensive positions along frontlines, holding cities and lines of supply was abandoned very quickly since this could have led to its total annihilation. The visible rout of the Taliban and Al Qaeda fighters, their abandonment of major Afghan cities, and their melting away into Pakistan was due to the realization that the Taliban needed to adopt a more unconventional approach against an overwhelmingly superior force. This organizational adaptation is seen as the abandonment of a strategy that could have led to their destruction and instead allowed them to regroup and prepare themselves for the strategy of guerrilla warfare.

From the point of view of moderating the information environment, too, the withdrawal strategy of the Taliban and Al Qaeda is worth pondering. In order to moderate, and to a large effect nullify, the informational advantage that the United States possessed immediately after 9/11 to undertake operations against Al Qaeda and the Taliban, there was a need to undertake an *informational withdrawal*, which would allow the adversary to gain an advantage in the physical

²⁷⁷ Hy Rothstein, *Afghanistan and the Troubled Future of Unconventional Warfare*, 12-13.

domain, but create an informational vacuum that, in due course, would be filled by adverse information content regarding the United States and its allies. This was mainly due to the correct assessment of Taliban and Al Qaeda leadership that firstly, the anti-Taliban forces are equally fragmented and diverse, and secondly, that such an opportunistic coalition between various anti-Taliban warlords and United States forces would surely cause divisive turbulence in Afghanistan. On the face of it, the sudden withdrawal of the Taliban and Al Qaeda appeared as a crushing defeat, but it enabled them to settle down for the *long haul*. The Frontline PBS video titled the “The Return of the Taliban,” which aired on October 3, 2006, gives a pointed reference to the manner in which the Taliban and Al Qaeda have established themselves in the semi-autonomous tribal lands of Bajaur, Momand, Khyber, Orakzai, Kurram, and North and South Waziristan in Pakistan.²⁷⁸ The regrouping and resurgence that is visible today is amply clear from the increasing number of terrorist incidents in Afghanistan.

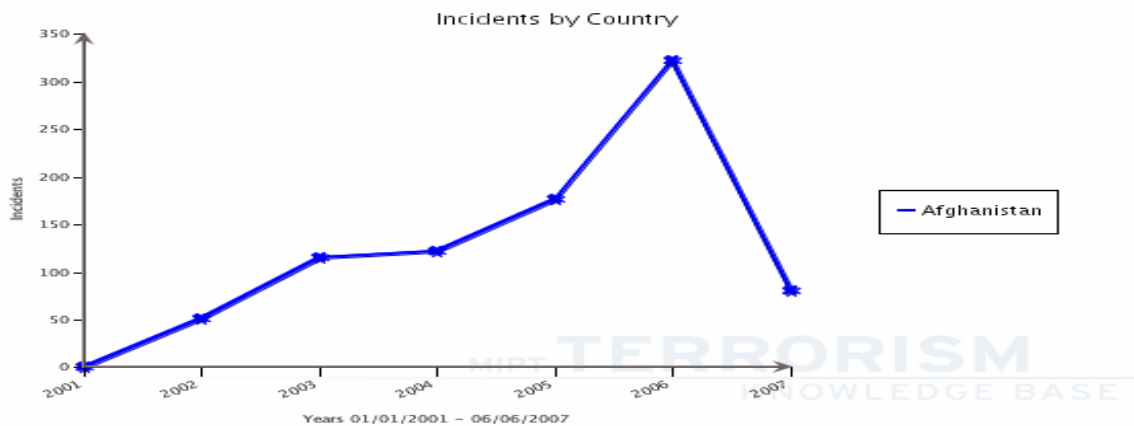


Figure 7. Terrorist Incidents in Afghanistan: 2001-May 2007²⁷⁹

²⁷⁸ Martin Smith, "Return of the Taliban," written, produced and reported by Martin Smith, Frontline PBS video, aired on Oct 3, 2006 [on-line], available from <http://www.pbs.org/wgbh/pages/frontline/taliban/>, accessed Jun 1, 2007. This video provides an insight about the most dangerous breeding grounds of Islamist terrorism and how the Pakistan government and its intelligence agencies are still trying to forge a symbiotic relationship with militant groups to survive. Such a relationship may provide a temporary respite, but as Ryan Crocker, the U.S. Ambassador to Pakistan, in his interview (as part of the program) says, "...here are some people with whom deals simply are not going to be possible."

²⁷⁹ Memorial Institute for the Prevention of Terrorism (MIPT) Terrorism Knowledge Base [on-line], available from <http://www.tkb.org/AnalyticalTools.jsp>, accessed Jun 6, 2007. The graph depicts terrorist incident up to May 30, 2007.

In spite of the official anti-Taliban posture adopted by Pakistan, most of the withdrawing members of the Taliban and Al Qaeda established themselves in the western part of Pakistan along the Afghanistan-Pakistan border. Pakistan provided an unassailable safe haven for the Taliban and Al Qaeda leadership, training, supplies, funding, and recruitment. The failure to deny a safe haven in Pakistan has led to the inability of the United States and its allies to translate their tactical victories in Afghanistan into strategic control.²⁸⁰

The Taliban's Quetta *Shura* (council) located in Quetta, Pakistan, the main center of Taliban strategic command and control in South Afghanistan, is more robust now. Another *Shura* directing the Taliban operations in East Afghanistan is based in the Pakistani tribal regions of North and South Waziristan.²⁸¹ The command and control setup necessary to prosecute an insurgency through the tactics of guerrilla warfare appears to be in place. Along with the re-establishment of the command and control structure, the number of Taliban units and the force strength within has also seen an increase and the initial nuisance tactics of using small groups of fighters is now giving way to attacks involving hundreds of fighters.²⁸² Taliban forces are coming around full-circle, from number-heavy defensive positions, to small, dispersed attacking groups, to the present, which involve large groups of fighters that are equally adaptive. The only difference from 2001 to 2007 is that the Taliban now appears to be on the offensive and has grasped the initiative.

2. Taliban Information Strategy and Tactics

The Taliban has always had a symbiotic relationship with Al Qaeda and this relationship has defined the way it evolved its strategy and tactics after 9/11.

²⁸⁰ Barnett R. Rubin, "Still Ours to Lose: Afghanistan on the Brink," testimony to the Senate Foreign relations Committee, Sep 21, 2006 [on-line], available from <http://www.senate.gov/~foreign/testimony/2006/RubinTestimony060921.pdf>, accessed Jun 1, 2007.

²⁸¹ Barnett R. Rubin, "Still Ours to Lose: Afghanistan on the Brink."

²⁸² Ahmed Rashid, "Letter from Afghanistan: Are the Taliban Winning?" *Current History* 106, Jan 2007, 17-20 [on-line], available from http://www.currenthistory.com/org_pdf_files/106/696/106_696_17.pdf, accessed Jun 1, 2007.

The influence of Al Qaeda on the Taliban was much greater than the other way around and, as Daniel Byman highlights the point; “*Such a relationship is perhaps unique in the annals of terrorism, where almost invariably states are far more powerful than terrorists groups.*”²⁸³ This unique relationship laid the foundation toward adopting, in a somewhat fragmented manner, the information strategy and tactics of Al Qaeda against the United States-led forces after 9/11. The embrace of a simple Islamic way of life by the Taliban during its initial evolving years, and the inward focus toward rebuilding and influencing its own society, gave way to a much broader cause that can clearly be attributed to the influence of Al Qaeda. But the focus on the Afghan populace by the Taliban still remains.

The Taliban lacks the sophistication of Al Qaeda in exploiting the information environment through the use of media and other propaganda outlets, but are now seen as actively trying to utilize it for influencing the people of Afghanistan. Prior to 9/11, the Taliban ran the Voice of Sharia radio station from Kabul that broadcast religious discourses and official decrees. The radio station was one of the first to be targeted by the United States-led coalition forces.²⁸⁴ The Taliban’s aversion to television as un-Islamic, the banning of video tapes, and the dislike of having a spokesman in front of a camera talking to media, hindered the acceptability of media as a propaganda tool. Since the beginning of 2003, there appears to a concerted effort by the Taliban toward the establishment of a propaganda infrastructure emanating out of Pakistan. In February 2003, the Peshawar-based Afghan Islamic Press cited a fatwa signed by “Amir al-Mo’menin, the Servant of Islam, Mullah Mohammad Omar Mujahed” addressed to the people of Afghanistan that stipulated that it was every Muslim’s duty to wage a Jihad, and it also warned that anyone helping the United States-led coalition forces deserved death. From thereon, there has been a rise in the so called ‘official spokesman for the Taliban’ and the list includes names like

²⁸³ Daniel Byman, *Deadly Connections: States that Sponsor Terrorism* (New York: Cambridge University Press, 2005), 188.

²⁸⁴ Leigh Armistead, *Information Operations: Warfare and the Hard Reality of Soft Power*, 150.

Mohammad Mokhtar Mojahed, Hamed Agha, Mullah Abdul Samad, Mufti Latifullah Hakimi, Mullah Dadullah, and many others.²⁸⁵ The channel adopted by these spokesmen to convey their messages was the use of telephonic conversations and faxed statements to prominent international media outlets. Many of the so called spokesmen have been arrested in Pakistan, or killed, and that has actually decreased information on the flow of activities, from the Taliban perspective, in the public domain.²⁸⁶ Prominent amongst the spokesmen was Mullah Dadullah who emerged as an important leader as the Taliban re-emerged as a fighting force in 2005. He began to give interviews to selected journalists, including television interviews, and released propaganda videos vowing to send waves of suicide bombers and fighters into Afghanistan to overthrow the government. Mullah Dadullah was eventually killed in May 2007 and this was seen as a substantial blow to the Taliban re-emergence as well as to its propaganda machinery.²⁸⁷ The Taliban's Voice of Sharia radio station is once again active, though intermittently, and could be heard in parts of four south-eastern provinces: Paktika, Paktia, Khost, and Ghazni.²⁸⁸ The use of a mobile transmitter, to avoid being targeted by the coalition forces, appears to be an effective tactic and its increase in activity in the Southern and South-Eastern parts of Afghanistan may be equated to the re-emergence of the Taliban in that region.

The Taliban focused its propaganda activities on two fronts: the first, aimed at discrediting the coalition forces, and the second, a more dominant

²⁸⁵ Amin Tarzi, "Afghanistan: Neo-Taliban Free To Communicate With Media," Radio Free Europe Radio Liberty [on-line], available from <http://www.rferl.org/featuresarticle/2005/8/7FCBD083-8E0D-4003-8D4C-603D0110AAF2.html>; accessed Jun 16, 2007.

²⁸⁶ Ron Synovitz, "Afghanistan: Pakistan Hails Capture of Taliban Spokesman as Breakthrough," Radio Free Europe Radio Liberty [on-line], available from <http://www.rferl.org/featuresarticle/2005/10/d9118b1c-d410-4554-886a-59b93c5952a4.html>; accessed Jun 16, 2007.

²⁸⁷ Taimoor Shah and Carlotta Gall, "Top Taliban Commander Is Killed in Clash," New York Times, May 13, 2007 [on-line], available from <http://www.nytimes.com/2007/05/13/world/asia/13cnd-afghan.html?ex=1184040000&en=a34b02fdf4dda136&ei=5070>; accessed Jun 16, 2007.

²⁸⁸ Pam O'Toole, "Taliban Radio Station Back on Air," BBC News, Jun 21, 2007 [on-line], available from http://news.bbc.co.uk/2/hi/south_asia/6224972.stm, accessed Jun 22, 2007.

campaign against the people of Afghanistan. These activities were largely undertaken through the covert distribution of pamphlets in various cities of Afghanistan, as well as circulated amongst the refugees in Afghanistan and Pakistan.²⁸⁹ The pamphlets or notes are known as “night letters,” as they are posted under the cover of darkness and are mainly directed against the people of Afghanistan supporting either the coalition forces or the government of Afghanistan in some way. The tactic is aimed at intimidating the populace and sowing the seeds of fear and doubt, with the ultimate goal of re-imposing the Taliban’s primeval control over parts of the country.²⁹⁰ Such intimidating notes, coupled with surgical attacks on Afghan people who support the government and coalition forces has led to an increase in disillusionment in the minds of the people of Afghanistan about their future under the Karzai government. The psychological impact of such a campaign could lead to the erosion of support for the established government in Afghanistan and provide a back door for the entry of the Taliban. This cost-effective tactic, that is till now limited to the areas in and around Kandahar, may be replicated in other parts of Afghanistan and is required to be effectively combated by an increase in the security infrastructure in Afghanistan.

The present director of the CIA, during a statement to the Senate Armed Services Committee, acknowledges the importance of security when he says, “*The capacity of the government needs to be strengthened to deliver basic services to the population—especially security.*”²⁹¹ The exploitation of the inadequate security situation in the regions around Kandahar has led the Taliban to establish some kind of pseudo-government and to establish Taliban-style

²⁸⁹ Leigh Armistead, *Information Operations: Warfare and the Hard Reality of Soft Power*, 149.

²⁹⁰ Aryn Baker, “Deadly Notes in the Night,” *Time*, Jul 5, 2006 [on-line], available from <http://www.time.com/time/magazine/article/0,9171,1209945,00.html>, accessed Jun 16, 2007.

Also see “A Night Letter” as part of Martin Smith’s “Return of the Taliban,” Frontline PBS video., aired on Oct 3, 2006 [on-line], available from <http://www.pbs.org/wgbh/pages/frontline/taliban/etc/nightletter.html>

²⁹¹ Michael V. Hayden, Director, Central Intelligence Agency, “The Current Situation in Iraq and Afghanistan,” Statement for the Record Senate Armed Services Committee, Nov 15, 2006 [on-line], available from <http://armed-services.senate.gov/statemnt/2006/November/Hayden%2010-15-06.pdf>, accessed Jun 16, 2007.

Islamic courts that allow people to come to the Taliban to settle their disputes and to patrol the insecure society.²⁹² This is yet another step that the Taliban has adopted toward establishing its authority. The Taliban's accurate assessment of directing its propaganda effort toward targeting the populace and not attempting to disperse its efforts and resources in targeting the coalition forces as an initial part of its resurgence is noteworthy.

The importance of modulating the information environment by actions in the physical domain has been quite well understood by the resurgent Taliban. There has been an increase in the number of kidnappings of foreign nationals in Afghanistan as well as attacks on Afghani people supporting the government and coalition forces. The latest example is that of the kidnapped Italian journalist Daniele Mastrogiacomo in March 2007 that raised a big turmoil on the Italian political scene and threatened the withdrawal of 1,950 Italian troops from the NATO coalition in Afghanistan. President Karzai brokered the release of the Italian journalist by trading five Taliban prisoners, but refused to negotiate for his Afghan translator, which eventually led to his beheading. Such an event has led to an increase in the number of kidnappings of foreign nationals in order to obtain similar concessions and has also led to *'driving a wedge between Karzai and the Afghan public.'*²⁹³ Mullah Dadullah, in an interview with an Al Jazeera correspondent in April 2007 remarked, *"Karzai, you consider yourself a president elected by the Afghan people. Why do not you take care of the Afghan people, instead of taking care of the foreign hostage, and swap him with five Afghans?"*

²⁹² Rahimullah Yusufzai, "Out-of-Power Taliban Resumes Public Execution," ABC News Online, May 15, 2006 [on-line], available from <http://abcnews.go.com/International/story?id=1963240>, accessed Jun 17, 2007.

²⁹³ David Montero, "New Strategy in Taliban's Offensive: Kidnappings are the Taliban's New Weapon of Choice in Afghanistan," *Christian Science Monitor*, Apr 11, 2007 [on-line], available from <http://www.csmonitor.com/2007/0411/p01s01-wosc.htm>, accessed Jun 18, 2007. Also see Declan Walsh, "Afghans Admit doing Deal with Taliban to Free Italian Hostage," *The Guardian*, Mar 21, 2007 [on-line], available from <http://www.guardian.co.uk/afghanistan/story/0,2038813,00.html>, accessed Jun 18, 2007. Also see BBC News, "Afghan Hostage Deal is Condemned," Mar 22, 2007 [on-line], available from http://news.bbc.co.uk/2/hi/south_asia/6478793.stm, accessed Jun 18, 2007.

*You do not care about the Afghan people.*²⁹⁴ The targeting of an Italian journalist is quite noteworthy due to the fact that the Italian government, led by Prime Minister Romano Prodi, was in the midst of a vote in its Senate on the funding of the Italian military contingent in Afghanistan and that Romano Prodi had in February 2007 resigned on the Afghanistan issue before being reinstated.²⁹⁵ The understanding of such a complex relationship involving a weak political situation in a country that is part of the coalition forces, and the assessment of its impact both in that country and in Afghanistan by the Taliban, depicts the increasing strategic influence of Al Qaeda in its tactics and activities. The use of such tactics by the Taliban is bound to increase in order to extract similar responses as well as to impact the overall information environment.

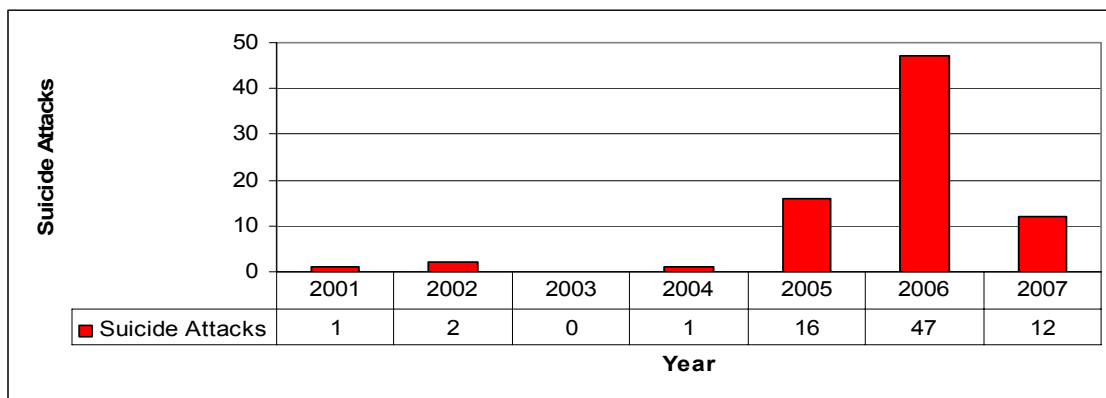


Figure 8. Suicide Attacks in Afghanistan: 2001 - June 2007.²⁹⁶

²⁹⁴ Ahmed Zaidan, "Interview with Mullah Dadullah," Al Jazeera, Apr 2007 [on-line], available from <http://english.aljazeera.net/NR/exeres/BDC2540E-67F8-4019-9AD5-698720FE16CE.htm?FRAMELESS=true&NRNODEGUID=%7bBDC2540E-67F8-4019-9AD5-698720FE16CE%7d>, accessed Jun 18, 2007.

²⁹⁵ Christian Fraser, "Prodi Attacked on Afghan 'deals,'" BBC News, Apr 10, 2007 [on-line], available from <http://news.bbc.co.uk/2/hi/europe/6541137.stm>, accessed Jun 18, 2007.

²⁹⁶ Memorial Institute for the Prevention of Terrorism (MIPT) Terrorism Knowledge Base; [on-line], available from <http://www.tkb.org/AnalyticalTools.jsp>, accessed Jul 2, 2007.

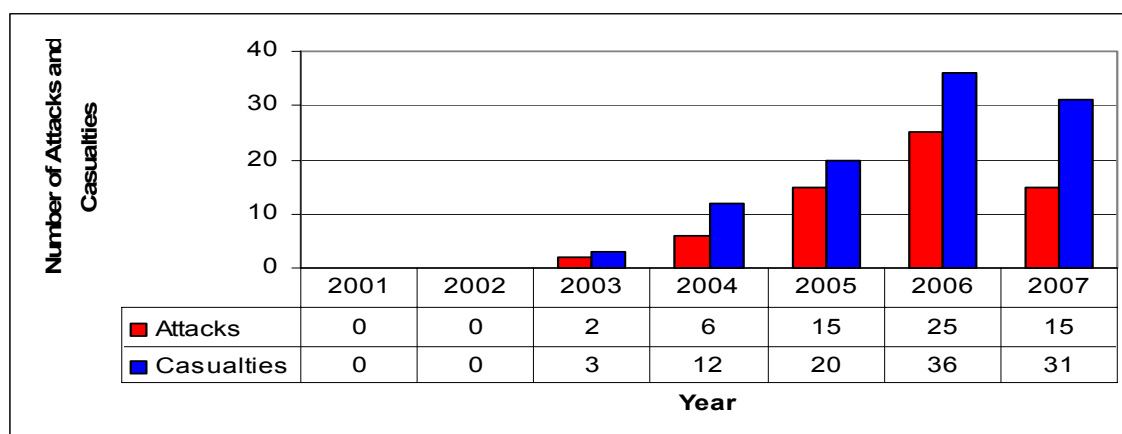


Figure 9. IED Attacks on Coalition Forces in Afghanistan: 2001–June 2007.²⁹⁷

The activity in the physical domain has also undergone a change for the Taliban. There has been a considerable increase in the number of suicide and IED attacks in Afghanistan. These two tactics in particular have been adopted from Al Qaeda and support the '*diffusion theory*' as elucidated in Chapter II. The information flow on tactics from Pakistan to Afghanistan, and from Iraq to Afghanistan is quite evident. In the larger context of terrorism worldwide, suicide attack has become a common tactic to inflict non-combatant casualties and for causing a big media event, while an IED attack is mainly directed toward inflicting combatant casualties in regions that have terrorists and government/coalition forces fighting for supremacy and control. The impact of suicide attacks that inflict greater numbers of civilian casualties may lead to a more hostile information environment toward the Taliban and Al Qaeda in Afghanistan. Therefore, the suicide attacks taking place in Afghanistan are mainly directed toward 'hard targets'; this is quite different from the objectives of suicide attacks in Iraq.²⁹⁸

²⁹⁷ The data has been extracted from the casualties database of coalition forces maintained by the website: www.icasualties.org [on-line], available from <http://icasualties.org/oef/>, accessed Jul 2, 2007. The website utilizes DoD and CENTCOM press releases regarding casualties in OEF and OIF to maintain its database.

²⁹⁸ Brian Glyn Williams and Cathy Young, "Cheney Attack Reveals Taliban Suicide Bombing Patterns," *Terrorism Monitor*, Vol. 5, Issue 4, Mar 1, 2007 [on-line], available from <http://www.jamestown.org/terrorism/news/article.php?articleid=2370264>, accessed Jun 19, 2007.

3. Al Qaeda in Afghanistan

Al Qaeda may never again have the luxury of establishing the kind of infrastructure that it did in Afghanistan prior to 9/11, but at present it is seen more as a *base-less organization* and an informational warrior that has established itself as the vanguard of global Islamist terrorist networks and that has a substantial ideological influence on its numerous affiliates worldwide. There is an informational vacuum with regard to Osama bin Laden, and Ayman Zawahiri is appearing to be more in control and more visible. The Al Qaeda network is more dispersed and at present depends more on independent actions undertaken by its followers all around the world to keep it in the limelight. The remnant of Al Qaeda has found a safe haven in the Afghanistan-Pakistan border area and this has allowed Al Qaeda to re-group both physically and psychologically, and it now has the necessary space needed to meet, train, expand its networks, and prepare for new attacks.²⁹⁹

In May 2007, Al Qaeda named an Egyptian, Mustafa Ahmed Muhammad Uthman Abu al-Yazid, as the group's leader for activities in Afghanistan. Yazid has been a close aide of Osama bin Laden and served as his accountant during his exile in Sudan. The appointment of a man who has been an accountant to be a military leader of Al Qaeda in Afghanistan would imply that Al Qaeda may be playing a supporting role to the resurgent Taliban and assisting in organizing the needed finances for the Taliban.³⁰⁰ Al Qaeda's support for the Taliban is stronger than earlier and it has been able to persuade Taliban fighters to adopt its tactics, especially the beheadings and suicide attacks. Al Qaeda is likely to play a supportive role to the Taliban now that the ideological differences that existed between the two seem to have merged into the present scenario.

²⁹⁹ Michael V. Hayden, Director, Central Intelligence Agency, "The Current Situation in Iraq and Afghanistan," Statement for the Record Senate Armed Services Committee, Nov 15, 2006.

³⁰⁰ Michael Scheuer, "Al-Qaeda's New Leader in Afghanistan: A Profile of Abu al-Yazid," *Terrorism Focus*, Vol. 4, Issue 21, Jul 3, 2007 [on-line], available from <http://jamestown.org/terrorism/news/article.php?articleid=2373518>, accessed Jul 6, 2007.

C. SUMMARY OF INFORMATION OPERATIONS AND THE INFORMATION ENVIRONMENT IN AFGHANISTAN

After the initial set-backs in Afghanistan, the Taliban has slowly and surely regained some of its lost ground. Some of the important aspects, in the complete spectrum of information operations in Afghanistan, along with the actions that define the information environment are summarized in the following paragraphs.

1. Summary of Information Operations – Coalition Forces vs Taliban-Al Qaeda

The coalition forces command and control structure became more hierarchical and cumbersome after the initial victory, the progression from loose control to tight control. The initial offensive mode of operation turned more and more defensive and reactive, and there was an increase in 'command at a distance syndrome.' There were chinks that became visible in the NATO coalition, and there was no effort to integrate non-NATO nations not adequately integrated into the nation building effort. In the case of the Taliban-Al Qaeda combine, their forces became increasingly more networked and distributed and adopted tactics of guerrilla warfare after the initial set backs. The Taliban is dependent on radical, motivated and charismatic leaders in the field to lead the *foot-soldiers*, and hence the elimination of their leadership is bound to have a negative impact. The Taliban has evolved an organizationally stable system with most of the top leadership safely planning and directing missions from Pakistan.

The coalition force was successful in applying intelligence obtained through their technological assets (like UAVs) applied effectively for targeting and shortening the decision cycle. The two negative points about the coalition intelligence process is the lack of effective human intelligence and the assessment regarding Taliban and Al Qaeda terrorists is often under-stated. The Taliban-Al Qaeda intelligence is based more on humans and supporters within the population, and their use of Internet for surveillance, intelligence gathering and communication from safe havens in Pakistan cannot be ruled out.

EW in its classical form was never used by the coalition forces since there were no worthwhile targets and hence the airborne EW (SEAD) assets were not tested. The ground based EW systems are at the forefront for – identifying / locating Taliban communication transmitters using electronic support measures, or used in counter-IED role. The SIGINT is an important aspect in present day scenario. The Taliban-Al Qaeda forces had no EW assets but used innovative electronic emitters as triggers for remote controlled IEDs to target coalition military forces.

Initially, the coalition forces PSYOP plan appeared uncoordinated, cumbersome and with a time-consuming approval process. Over a period of time, however, the emphasis on ‘winning the hearts and minds’ of the Afghan population has been well understood. There appeared to be a resource crunch in the field in terms of equipment and manpower, and there was too much reliance on out-of-area resources and out-of-area experts. The military / operational PSYOP needs greater coordination with strategic level effort including Public Affairs undertaken by channels other than military. Finally, the concepts of Information Isolation, Information Deficiency and Information Withdrawal are important ideas that need to be studied further from the perspective of coalition forces to effectively influence the Afghanistan battle space. On the other hand, the initial efforts of Taliban-Al Qaeda in PSYOP were not very successful. But now the PSYOP, coupled with surgical physical strikes are aimed for intimidating the local population and fragmentation of coalition. Taliban has succeeded in re-establishing its Islamic courts in areas around Kandahar and creating a pseudo parallel state.

Civil affairs and nation building are acknowledged as important issues but were neglected by the coalition forces after the initial victory, which has created *holes* in the victory. The use of PRTs is a good idea but requires greater emphasis and adequate priority. This is the category where the Taliban is lacking and needs to be exploited to win over the population as well as to undermine the Taliban.

The coalition forces were successful for launching physical attacks on the Taliban during the start of the operations, but over a period of time the physical attacks have become more reactive, and hence there is less control on their impact on the information environment. The increase in collateral damage also has an adverse impact on the information environment and needs to be minimized at all cost. The Taliban is able to plan specific physical attacks to magnify its informational objectives, with random attacks in cities to maintain a situation of chaos and lead to anarchy, and surgical strikes on coalition forces to exploit the fragile political consensus / situation in NATO member states. But again an increase in killing and injury to Afghan population due to the Taliban attacks will to their alienation from its support base.

	Coalition Forces	Taliban – Al Qaeda
Organizational Adaptation	-	-/+
Intelligence	-/+	-/+
Electronic Warfare	-/+	-/+
Psychological Operations	-/+	+
Civil Military Operations and Nation Building	-/+	--
Physical Attacks	-/+	++

Table 5. Summary of Information Operations in Afghanistan – Coalition Forces vs Taliban- Al Qaeda.

2. Actions Influencing the Information Environment in Afghanistan

There are a number of actions at the macro level in the physical as well as in the informational domain that are likely to influence the overall information environment in Afghanistan in times to come, in either a positive manner or a

negative manner for the coalition forces. It is important that the coalition forces keep a focus on these aspects in developing their informational strategy and tactics so as to meet their objectives as well as to modulate the information environment that is created by such actions.

Positive Actions	Negative Actions
<p>Strengthening of coalition – increase in participation, greater cohesiveness, resilience, and commitment in the existing military alliance and involving non-coalition partners to assist in nation building especially Russia, China, Iran and India.</p> <p>Creation of a separate economic, political, and diplomatic alliance to include greater participation of other international players.</p>	<p>Fragmentation of the NATO coalition and increase in adverse reactions worldwide especially in the Muslim world.</p> <p>Increase in adverse public opinion in NATO-allied countries equating United States policies in Iraq with Afghanistan.</p>
<p>Assist government in Afghanistan in providing basic necessities – electricity, water, roads and agriculture to the population including security.</p> <p>An increase in focus toward Afghanistan and balancing the war-time and reconstruction efforts vis-à-vis Iraq.</p> <p>Greater pressure on Pakistan to undertake <i>cleansing</i> of Taliban bases, sanctuaries and strong-holds from its tribal regions as well as from the cities like Quetta and Peshawar.</p>	<p>Success of Taliban in exploiting ethnicity and tribal affinity within Afghanistan as well as in the Western part of Pakistan that will enable them to exert greater dominance in South and South East part of Afghanistan.</p> <p>Increase in disruptive actions of Taliban affecting the Afghan society – kidnapping, destruction of schools and civilian infrastructure, impediments in relief and reconstruction efforts.</p> <p>Increase in collateral damage including injury and death of Afghani people by actions of coalition forces.</p>
<p>Steps to increase greater transparency and moral approach of the Afghan government to prevent the ideas of corruption, lawlessness and dissatisfaction amongst the population.</p>	<p>Factionalism and infighting within the disparate entities as part of the Afghan polity.</p> <p>Increase in war-lordism and self-proclaimed rulers in Afghan provinces.</p>

<p>Increase in troop presence in Taliban dominated region to neutralize the resurgent Taliban.</p> <p>Targeting of Taliban and Al Qaeda leadership both in Afghanistan and Pakistan.</p>	<p>Consolidation of control by Taliban in regions in and around Kandahar.</p> <p>Ability of Taliban to facilitate poppy cultivation and drug trade in Afghanistan especially South and South East Afghanistan.</p> <p>Greater cooperation and coordination between Taliban and Al Qaeda, especially the financial support to Taliban.</p>
<p>Increase in resources for the coalition military setup to include – ground based EW (SIGINT) systems, UAVs, satellite tasking for surveillance and communication, PSYOP resources including manpower.</p>	
<p>Interagency coordination amongst the coalition forces (military), respective coalition country's political setup and especially with the United States political apparatus for conducting information operations. Also, coordination does not mean excessive control and delayed decision making.</p>	

Table 6. Actions Influencing the Information Environment in Afghanistan.

3. Concluding Remarks

*Afghanistan is yet another blunt warning that it's time that U.S. war planners begin to plan for true victory, not simply defeat of enemy military forces. The time – if it ever existed – when military planners needed to plan only for war is long over. In fact, it seems fair to say that war plans that do not include peace plans have always been signs of gross military incompetence.*³⁰¹

— Anthony H. Cordesman

³⁰¹ Anthony H. Cordesman, *The Lessons of Afghanistan: War Fighting, Intelligence and Force Transformation*, Significant Issues Series, Vol. 24, Number 4, Center for Strategic and International Studies, Washington, D.C., 2002, 55.

The decision of the United States to launch operations in Afghanistan as the first step in its Global War on Terror was 'right on the mark.' The region of Afghanistan, and now Pakistan, is the epicenter of Islamist terrorism and acceptance of this fact, coupled with the necessary focus and commitment by the United States and its allies is absolutely essential. The successful prosecution of OEF that must culminate with a stable and secure Afghanistan, and a terror-free Pakistan will lead to the ultimate suppression of Islamist terrorism in other parts of the world.

It may be unpopular that most post-conflict peace involves some form of prolonged occupation, peace keeping, and nation building, but it is a fact that military action can have lasting benefits only if the military (and their political leaders) are willing to pay the necessary price. In war, more than in any other human activity, no country should begin what it is not prepared to finish ... The political leader unwilling to face this reality is at best creating a recipe for military futility and at worst a recipe for disaster.³⁰²

— Anthony H. Cordesman

³⁰² Anthony H. Cordesman, *The Lessons of Afghanistan: War Fighting, Intelligence and Force Transformation*.

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V. BATTLE IN THE INFORMATION DOMAIN IN IRAQ

The United States-led war in Iraq, as part of the Global War on Terror (GWOT), began on 19 March 2003 with eight specific mission objectives that included: ending the regime of Saddam Hussein, eliminating Iraq's weapons of mass destruction (WMD), capturing or driving out terrorists, collecting the intelligence of terrorist networks, collecting the intelligence on Iraq's weapons of mass destruction activity, securing Iraq's oilfields, delivering humanitarian relief and ending sanctions, and helping Iraq achieve representative self-government to ensure its territorial integrity.³⁰³ Less than 25 days into the campaign the Saddam Hussein regime was toppled, the oil fields were secured, a search for WMD was underway and the kind of terrorists envisaged by policy makers to be present in Iraq were not visible. Hence, from a purely military warfare perspective, the mission to end the regime of Saddam Hussein and defeat his conventional military force were successfully achieved in a surprisingly short time-frame, without any worthwhile resistance or casualties.

However, after four years, looking back at the objectives of the Iraq war and where the coalition forces have reached so far, we see that: no WMD have been discovered in Iraq; terrorists from all over the Muslim world have moved into Iraq to fight the Jihad against the *occupation force*; the impact of the humanitarian relief, although flowing in, is not felt sufficiently by the Iraqi people; scores of thousands of innocent Iraqis are dead in this war; and the so-called representative government is seen as always on tenterhooks. The repercussions on the coalition forces during this period are worth pondering. The coalition force that hoped to be the *liberators* are now seen as *occupiers* and with each passing day, the coalition is getting further fragmented and almost every member of the coalition is trying to figure out a *face-saving exit strategy*. The rating of the United States' commander in chief has gone down as never before, and the prime

³⁰³ Jim Garamone, "Rumsfeld Lists Operation Iraqi Freedom Aims, Objectives," *American Forces Press Service* [on-line], available from <http://www.defenselink.mil/news/newsarticle.aspx?id=29253>, accessed Jul 9, 2007.

minister of the closest ally of the United States, in this war, has resigned from his post as an aftermath of the war. Further, the reputation of the United States as the *sole superpower* is being threatened, Al Qaeda and Taliban are resurgent and gaining strength, and there is a greater sense of antipathy in the Muslim world toward the United States due to its policies in Iraq.

From a purely military perspective, and keeping in view the achievements of the first month of the Iraq war, the plan to invade and topple the regime of Saddam Hussein was incredible. In his testimony to Congress on July 9, 2003, Donald Rumsfeld, the former Secretary of Defense stated,

*The plan they [United States military planners] developed for Operation Iraqi Freedom was even more innovative and transformational [than OEF] – employing an unprecedented combination of speed, precision, surprise, and flexibility.... The Iraqi regime very likely expected the war to begin, as did the 1991 Gulf War, with a sustained bombing campaign. Instead, General Franks started the ground attack before the air campaign—sending a large force of Special Operators into Western Iraq, followed by thousands of coalition forces streaming across the Kuwaiti border. Instead of a long march through the South, with pitched battles for each city along the way, they drove through to reach the gates of Baghdad in a matter of weeks—liberating the Iraqi capital and toppling the regime in less than a month.*³⁰⁴

Although the initial battle was short and swift, the coalition forces were not able to anticipate the *melting away mystery* of the Iraqi military and a complete collapse of government-run institutions.³⁰⁵ This sudden collapse of the ‘rule of

³⁰⁴ Donald Rumsfeld, testimony to Senate Armed Forces Committee, Jul 9, 2003 [on-line], available from <http://armed-services.senate.gov/statemnt/2003/July/Rumsfeld.pdf>, accessed Jul 9, 2007. Also see the statement of General Tommy Franks, former commander of U.S. CENTCOM, to the Senate Armed Forces Committee on Jul 9, 2003, wherein he states that – “Our forces were able to achieve their operational objectives by integrating ground maneuver, special operations, precision lethal fires and non-lethal effects. We saw for the first time integration of forces rather than deconfliction of forces. This integration enabled conventional (air, ground, and sea) forces to leverage SOF capabilities to deal effectively with asymmetric threats and enable precision targeting simultaneously in the same battle space.”

³⁰⁵ John Keegan, *The Iraq War* (New York: Alfred A. Knopf, 2004), 1-7. The author calls the war “A Mysterious War” since there was a *mysterious* approach to defensive operations by the Iraqi military (melting away mystery), then there was the mystery of the missing government and the Iraqi leaders in Baghdad, there was the *mystery* of the WMD that seemed to have disappeared from Iraq without a trace, and finally the author writes about the *mystery* in the indifferent attitude of the Iraqi people.

law,' whatever form it was in, led to mass looting and a complete lawlessness in the country and especially in Baghdad. This situation was further compounded by the lack of any attempt by the coalition forces to stop such events and accept a responsibility to run the nation that they invaded.

The following quotes have been taken from the book *Squandered Victory* by Larry Diamond, and very vividly depict the impact of the large-scale looting in Baghdad.³⁰⁶

nothing else...So what else do you want us to think except that you want our oil?

— Shiite Cleric in Iraq

(After seeing that all the public institutions in Baghdad were gutted except for the one secular structure that the Americans defended — the oil ministry.)

I simply cannot understand how your soldiers could have stood and watched. Maybe they are too weak, too. Or maybe they are wicked.

— Islamic cleric to a journalist in Baghdad

Stuff happens...Freedom's untidy, and free people are free to make mistakes and commit crimes and do bad things.

— Donald Rumsfeld, Former Secretary of Defense

In retrospect, although the military operations proceeded too fast,³⁰⁷ it was the fact that the subsequent follow-up support of administrative echelons that included the political and diplomatic community, aid workers, nation-builders,

³⁰⁶ Larry Diamond, *Squandered Victory: The American Occupation and the Bungled Effort to Bring Democracy to Iraq* (New York: Times Books, 2005), 282. The comments of the former defense secretary are bewildering – there goes the information campaign at the strategic level. From a personal viewpoint the images of looting on the television were more of a spectacle that appeared to be authorized by the coalition forces for the rest of the world to see.

³⁰⁷ As an afterthought the situation in Iraq would have been much different at present if the conventional battle was joined by Saddam Hussein's military forces, as also in this case the timeline of conquering Iraq and the advance to Baghdad would have been more deliberate, and consciously delayed. Will this approach impact similar future action undertaken by United States or other militaries in similar situation? — is a point worth pondering over. Also, in the immediate stabilization phase, too, the United States wanted to achieve *too many things too fast* in Baghdad; in contrast the British troops in Basra took the pragmatic view and concentrated on establishing the law and order, and essential services in Basra. See, John Keegan, *The Iraq War*, 209.

etc., were totally missing was and this were the very reason that fuelled the insurgency.³⁰⁸ Saddam Hussein anticipated that there was no likelihood of his military force standing-up against the coalition military might, and never wanted to fight a conventional battle with a greatly superior force. Saddam Hussein correctly assessed that some form of unregulated, uncontrolled, and uncoordinated guerrilla warfare would be his best bet against the coalition forces. This is highlighted by the fact that there was no worthwhile resistance by the Iraqi military force against the coalition invasion, no bridges were blown or even demolitions prepared, and the people went along in their daily routine with firing and bombing going on around them.

Prior to the war, Saddam did carry out large-scale arming of Baathists and caches of ammunition and weapons were created both in cities and in the countryside. He also released large numbers of criminals from prison and Fedayeen Saddam and Baathist militias were stationed in urban areas.³⁰⁹ The guerrilla war and the insurgency appear to have been well planned, though not under central control. The initial lawlessness in Iraq, after fall of the Saddam regime, helped shape and promote the ongoing insurgency in Iraq. The people of Iraq, who looked forward to getting rid of Saddam Hussein and his regime, became disillusioned in no time by the inability of the coalition forces to provide security, a basic civic infrastructure in the cities, and their early return to a normal way of life. The information environment changed from *bad to worse*. In this chapter, the idea is not to analyze the conventional battles but to concentrate purely on the battles in the information domain that took place or are now going on against the asymmetric threat from terrorists and insurgents in Iraq.

³⁰⁸ Bruce Hoffman, "Insurgency and Counterinsurgency in Iraq," *Studies in Conflict and Terrorism*, 29; 103-121, 2006. The author mentions that the coalition forces lost an opportunity by failing to plan for a post-conflict stability operations, and anticipate the initial widespread civil disorder and looting. These factors fuelled the current insurgency situation in the country. The author also mentions about two studies undertaken by the RAND Corporation about past insurgencies that came out with similar conclusions that – "*Late recognition of an insurgency, is costly, insofar as the insurgents have the opportunity to gain foothold before facing any organized opposition.*"

³⁰⁹ Stephen T. Hosmer, *Why the Iraqi Resistance to the Coalition Invasion was so Weak* (Santa Monica: RAND Corporation, 2007), 131-140.

A. INFORMATION CAMPAIGN OF THE UNITED STATES AND ITS ALLIES IN IRAQ

The initial part of Operation Iraqi Freedom (OIF) was seen as a form of conventional campaign that has never been seen before with force and technology coordinated with precise maneuvers and timing. The information operations campaign in this phase of the operation were limited to only intelligence operations, electronic warfare (EW), and psychological operations (PSYOP), and although the entire spectrum of information operations was deliberated during the planning and execution of military operations, it failed to produce any dramatic results.³¹⁰

The United States-led coalition forces surely won this part of the campaign and exploited their conventional superiority to the fullest. But then the fall of Baghdad, the pulling down of the statue of Saddam Hussein in Firdos Square in central Baghdad on April 9, 2003, and the declaration that “*Major combat operations have ended in Iraq*” by the president of the United States³¹¹ did not end the war for the coalition forces. It actually got worse, and hence the aftermath of this *conventional blitzkrieg* and the magnanimity of the ‘*post-conflict conflict*’³¹² was neither comprehended nor anticipated. The lack of the United States military’s ability to grasp the intricacies of stability operations and peace-keeping stems from the fact that the United States’ military leaders and planners focused heavily on winning conventional wars against an almost equal enemy,

³¹⁰ Gregory Fontenot and et al., *On Point: The United States Army in Operation Iraqi Freedom* (Fort Leavenworth, Kansas: Combat Studies Institute Press, 2004), 419. The authors are of the view that it was difficult to assess success in the information operations campaign in the initial phase, and only electronic warfare and intelligence operations could actually produce visible positive results and as stated by them – ‘...it is hard to make the case that US efforts in the broad category of IO produced any dramatic results’.

³¹¹ George W. Bush, Jr., President of the United States of America, “President Bush Announces Major Combat Operations in Iraq Have Ended,” May 1, 2003 [on-line], available from <http://www.whitehouse.gov/news/releases/2003/05/20030501-15.html>, accessed Jul 9, 2007.

³¹² Anthony H. Cordesman, *The Iraq War: Strategy, Tactics and Lessons Learned* (Westport, CT: Praeger, 2003), 233.

and not so much on either the rise of irregular warfare in the form of insurgency and terror, nor on peace-keeping and nation-building.³¹³

1. The Initial Loss in the Strategic Information Campaign

The three major points that President Bush emphasized during his speech on October 7, 2002, prior to the launch of the operations in Iraq were: the Saddam Hussein regime's threat to the American people, its support of Al Qaeda terrorists, and its continuing efforts toward acquiring weapons of mass destruction.³¹⁴ These three issues and their justification have been debated by leaders, policy makers, academicians, journalists, and people all over the world. The information environment, generated by these principles for undertaking the second front in the GWOT, never saw the same enthusiasm and international support as compared to the operations in Afghanistan. In due course, after the launch of Operation Iraqi Freedom (OIF), the assumptions for undertaking the war were found to be flawed, unduly modulated by the Bush administration, and based on false premises. Even prior to the operations, polls conducted by the Program on International Policy Attitudes (PIPA) revealed that public support in the United States, on the decision to launch a unilateral attack on Iraq without the requisite authority of the United Nations, was minimal,³¹⁵ Similar polls conducted in Britain, as part of a survey for BBC ONE's *Iraq: Britain Decides* program,

³¹³ Conrad C. Crane and W. Andrew Terrill, *Reconstructing Iraq: Insights, Challenges, and Missions for Military Forces in a Post-Conflict Scenario*, Strategic Studies Institute, United States Army War College, Feb 2003. The author's foresight and vision is greatly acknowledged, wherein they could accurately predict the present post-conflict scenario in Iraq even before the war actually began.

³¹⁴ George W. Bush, Jr., President of the United States of America, "President Outlines Iraqi Threat," Cincinnati, Ohio, Oct 7, 2002 [on-line], available from <http://www.whitehouse.gov/news/releases/2002/10/20021007-8.html>, accessed Jul 9, 2007.

³¹⁵ Program on International Policy Attitudes (PIPA) Poll, "Americans on Iraq and the UN Inspections," Jan 2003 [on-line], available from <http://65.109.167.118/pipa/pdf/jan03/IraqUNInsp1%20Jan03%20rpt.pdf>, accessed Jul 9, 2007. According the polls, 63 percent of the population that was surveyed were against the decision to go to war with Iraq, but 60 percent indicated they would support the President, even though many of those disagreed with the decision. A poll conducted in July 2003 by the same organization found that the United States government was seen as "*stretching the truth*" when the government presented evidence of Iraq having weapons of mass destruction and Saddam Hussein having links with Al Qaeda. Full report titled "Americans On Iraq: WMD Links To Al-Qaeda, Reconstruction" is available at <http://65.109.167.118/pipa/pdf/jul03/IraqWMD%20Jul03%20rpt.pdf>, accessed Jul 9, 2007.

provided a similar outlook: 45 percent of the sample felt that the UK should not take part in a war "with or without a fresh mandate from the United Nations," 75 percent were of the opinion that a war against Iraq would damage relations with the Muslim community in Britain, 76 percent did not believe that conflict would deter terrorist groups from attacking the United States or Britain in the future, and 64 percent did not think that war would deter other countries from developing weapons of mass destruction.³¹⁶

Tony Blair's statement on February 12, 2003 painted a picture of the strategic level imbalances in the information environment when he said, "*Before we take the decision to go to war, the morality of that should weigh heavily on our conscience because innocent people, as well as the guilty, die in a war.*"³¹⁷ A further blow to the Tony Blair-led government in the United Kingdom, immediately before the war, came when Robin Cook resigned as Leader of the House of Commons, and in the statement announcing his resignation he says, "*The reality is that Britain is being asked to embark on a war without agreement in any of the international bodies of which we are a leading partner - not NATO, not the European Union and, now, not the Security Council.... Only a year ago, we and the United States were part of a coalition against terrorism that was wider and more diverse than I would ever have imagined possible. History will be astonished at the diplomatic miscalculations that led so quickly to the disintegration of that powerful coalition.*"³¹⁸ The verdict in the United Nations Security Council authorizing the war on Iraq was fragmented, and the United States' approach of a "pre-emptive" war lacked comprehensive international

³¹⁶ BBC Online, "Britain and America have yet to Prove the Case Against Saddam, Suggests BBC Poll," Feb 12, 2003 [on-line], available from http://www.bbc.co.uk/pressoffice/pressreleases/stories/2003/02_february/12/iraq_poll.shtml, accessed Jul 9, 2007.

³¹⁷ Tony Blair, Former Prime Minister of United Kingdom, speaking on the BBC's Iraq: Britain Decides program on Feb 12, 2003 [on-line], available from http://news.bbc.co.uk/2/hi/middle_east/2948068.stm, accessed Jul 9, 2007.

³¹⁸ BBC News, "Cook's Resignation Speech," Mar 18, 2003 [on-line], available from http://news.bbc.co.uk/2/hi/uk_news/politics/2859431.stm, accessed Jul 9, 2007.

support.³¹⁹ The war in Iraq that was undertaken on the pretext of the GWOT lacked justification since it focused on attacking a nation and a regime, rather than focusing on the real terrorists and their networks. The people, the ultimate *information arbiters*, and the majority of the world community gave a *thumbs-down* to the Iraq war even before it began. The strategic level information campaign in Iraq, therefore, began on a *wrong footing*.

2. Intelligence Effort – From Strategic to Tactical Levels

The United States had an overwhelming superiority in the intelligence domain regarding the Iraqi conventional forces and the physical environment in Iraq, mainly due to its experience in the first Gulf War and its involvement in the region thereafter, from undertaking extensive reconnaissance missions and enforcing ‘no-fly zones’ as part of Operation Southern Watch and Operation Northern Watch, to carrying out actual strikes in the region. The entire intelligence spectrum, at the tactical and operational level, was dominated by the United States with its use of high resolution satellite imagery, electronic, and signal intelligence infrastructure. The ability to fuse sensors to the operational and tactical decision making through the nearly real-time situational picture available at command centers was a demonstration of technological superiority that was, in any case, an accepted fact. The wide array of Intelligence, Surveillance and Reconnaissance (ISR), systems that have been developed and integrated into the United States’ war-fighting machinery, through concepts like

³¹⁹ Walter J. Boyce, Colonel, USAF (Retd), *Operation Iraqi Freedom: What Went Right, What Went Wrong, and Why* (New York: Forge, Nov 2003), 36. The author mentions that the United States and Great Britain could never get the ratification from the United Nations and formed a “Coalition of Willing” nations to use force in Iraq against the Saddam Hussein regime. Also see Glenn Kessler and Colum Lynch, “France Vows to Block Resolution on Iraq War: U.S. Schedule Put at Risk by U.N. Debate,” *Washington Post*, Jan 21, 2003. United States led forces did never get sanction for undertaking the war in Iraq and most of the members sought further diplomatic deliberations. In 2004, the former Secretary General of the United Nations – Kofi Annan, when pressed to answer the legality of the war said – “Yes, if you wish. I have indicated it was not in conformity with the UN charter from our point of view, from the charter point of view, it was illegal.” (BBC News, “Iraq war illegal, says Annan,” Sep 16, 2004, available from http://news.bbc.co.uk/2/hi/middle_east/3661134.stm). The opposition to the war in Iraq was also observed in the academic community world-wide and the use of other tools based on diplomacy, economic sanctions, arms control, etc were propagated as preferable methods to rein in the Saddam Hussein regime.

the Revolution in Military Affairs and Network Centric Warfare, provided the allied military with an unprecedented advantage. Sensors like the Predator and Global Hawk Unmanned Aerial Vehicles (UAVs) allowed situational awareness and targeting at the operational and strategic levels, while the Hunter UAV and Long Range Advanced Scout Surveillance System (LRAS3) gave tactical commanders an ability to acquire targets at a much greater range and with significantly better accuracy. The new information systems, such as the Force XXI Battle Command Brigade and Below (FBCB2) a high bandwidth interconnectivity through a host of beyond the line-of-sight communication systems, and extended connectivity through satellite communication radios, provided an unprecedented situational awareness in the battle space.³²⁰

Although the V Corps and the 3rd Infantry Division of the United States were fully integrated and show-cased as the fore-runners of defining the network-centric warfare concept, during actual operations in OIF, the 1st Marine Division provided a rather adverse picture of the overall battlefield intelligence, which included a lack of high-resolution imagery, lack of any worthwhile actionable intelligence from external intelligence agencies after crossing the Line of Departure (mainly due to high operational tempo), lack of tactical level intelligence collection platforms, and very little human intelligence to provide insight into the human dimension of the battlefield.³²¹ Another aspect of the intelligence process that could be lacking in some sense is the ability to share intelligence with coalition partners; this has issues ranging from training to interoperability of systems and people.³²² In the present counter-insurgency

³²⁰ Dave Cammons et al., *Network Centric Warfare Case Study: U.S. V Corps and 3rd Infantry Division (Mechanized) during Operation Iraqi Freedom Combat Operations (March to April 2003) – Volume I: Operations*, United States Army War College, Carlisle Barracks, PA, 2006, 23.

³²¹ GlobalSecurity.org Website, “Operation Iraqi Freedom: Lessons Learnt – 1st Marine Division” [on-line], available from http://www.globalsecurity.org/military/library/report/2003/1mardiv_oif_lessons_learned.doc, accessed on Jul 9, 2007. Also see Anthony H. Cordesman, *The Iraq War: Strategy, Tactics and Lessons Learned*, 185-190.

³²² United Kingdom Ministry of Defense, “Operations in Iraq: First Reflections” Jul 2003 [on-line], available from http://www.mod.uk/NR/rdonlyres/0A6289F6-898B-44C5-9C9D-B8040274DC25/0/opsiniraq_first_reflections_dec03.pdf, accessed Jul 9, 2003.

phase of OIF, intelligence always has the problem of defining the enemy: who is an enemy? — identification of an insurgent or terrorist; how many are there? — number of insurgents or terrorists; and where are they located? In this situation, there is a need to integrate technical intelligence assets more closely with human intelligence (HUMINT) assets to arrive at any definitive conclusion on these three basic questions about the enemy. The network of HUMINT operators supported by hi-tech intelligence assets is essential to obtain actionable intelligence against the insurgents and terrorists.

Military-based intelligence, in the initial phase of operations, may be regarded at times as sufficient, and at times as extraordinary. The macro intelligence, that takes into account the intelligence organizations and establishments at the national and strategic levels, and their ability in terms of defining strategic intelligence to support a national level decision for undertaking a war in the first place, and linking it to the GWOT was a debacle. The intelligence community's assessment of the ongoing development and presence of WMD in Iraq, establishment of definitive links between Saddam Hussein and Al Qaeda, and the miscalculation of the impact of the 'liberation war' on the people of Iraq, are some of the intelligence blunders that cannot be overlooked.³²³ In the after action report of the United Kingdom, one of the sore points of intelligence that was raised was the inability of the coalition to anticipate the complete and immediate collapse of the Iraqi organized military, and a total shift in their strategy to move toward an unorganized and non-coherent guerrilla warfare.³²⁴

3. The Psychological Operations Campaign

The PSYOP campaign for the OIF was underway much before the commencement of actual military operations. Since the end of the 1991 Gulf War, there has been a concerted effort on the part of the United States and its

³²³ Anthony H. Cordesman, *The Iraq War: Strategy, Tactics and Lessons Learned*, 405-407.

³²⁴ United Kingdom Ministry of Defense, "Operations in Iraq: First Reflections", 15.

allies to influence Iraq through strategic and tactical PSYOP.³²⁵ The strategic efforts included a long term plan to use media, international institutions, and *tailored* speeches by world leaders that addressed Saddam Hussein, his Baath Party, and the people of Iraq in particular. The tactical effort included radio broadcasts using airborne and land-based assets, as well as aircraft for dropping leaflets from time to time. The radio broadcasts had been going on for a considerably long time through land-based assets in Kuwait, and in late 2002, EC-130 Commando Solo aircraft began transmitting PSYOP broadcasts into Iraq. During the time frame from the launch of Operation Southern Focus in mid 2002 to the beginning of Operation Iraqi Freedom, more than 4.2 million leaflets were dropped. They targeted the Iraqi air defense operators warning them not to fire their weapons, threatened the Iraqi military regarding the armed Predators loitering in the space above Iraq, warned civilians and maintenance crews to stay away from fiber-optic vaults, and conditioned the Iraqi people to stay away from military installations.³²⁶ Another novel method was the use of a surreptitious e-mail campaign inside Iraq targeting key Iraqi leaders that, *'urge them to give up, to dissent and to defect. If they do not, the messages warn, the United States will go to war against them.'*³²⁷ The email campaign was planned jointly by the United States intelligence agencies and the military, and although the impact of it is difficult to ascertain, this is the first time that such a method was used as part of PSYOP. The overall aim of the PSYOP campaign, close to the launch of

³²⁵ Michael Andrew Knights, *Cradle of Conflict: Iraq and the Birth of Modern U.S. Military Power* (Annapolis: Naval Institute Press, 2005). The author is of the view that Iraq represents a 'cradle of conflict' in the post-Cold War period and that active U.S. military involvement in Iraq began in 1991 and is still continuing. The book contains many examples wherein the author has highlighted many events and activities, and although he has not termed them explicitly to form part of a PSYOP campaign but the same are quite easy to comprehend.

³²⁶ Michael Andrew Knights, *Cradle of Conflict: Iraq and the Birth of Modern U.S. Military Power*, 259. Also see, Justin Carmack, "PSYOP Begins Broadcast in Fallujah," *Desert Rifles*, Issue 15, Aug 15, 2003 [on-line], available from <http://www.carson.army.mil/Desert%20Rifles/Desert%20Rifles%2015August03.pdf>, accessed Jul 12, 2007.

³²⁷ Barbara Starr, "U.S. e-mail Attack Targets Key Iraqis," CNN Online, Jan 12, 2003 [on-line], available from <http://www.cnn.com/2003/WORLD/meast/01/11/sproject.iq.email/index.html>, accessed Jul 12, 2007. Also see, Michelle Delio, "U.S. Tries E-Mail to Charm Iraqis," WIRED Online, Feb 13, 2003 [on-line], available from <http://www.wired.com/politics/law/news/2003/02/57648?currentPage=2>, accessed Jul 12, 2007.

combat operations, was to establish an audience for radio broadcasts in Iraq, undermining the confidence of the Iraqi military and Iraqi security forces in Saddam Hussein's regime, degrading Saddam Hussein's confidence in his ability to control Iraq, and deterring the use of WMD.³²⁸

During the initial phases of operation, the PSYOP campaign in the theater was directed by the Joint Psychological Operations Task Force (JPOTF) located at Qatar. Although elements of the JPOTF were present with the combatant commanders on ground, a number of products were developed by the JPOTF that had a greater time-line for its dissemination. Although the radio broadcast facility was available in Iraq fairly quickly, the bulk of the leaflets were produced in either Kuwait or the United States.³²⁹ There was also a tedious chain of approval process that curtailed effective use of available PSYOP resources. The Tactical Psychological Operations Company (TPC) that was at the disposal of every United States division that crossed into Iraq had to get their PSYOP products approved by Commander CENTCOM even though they pertained to the division's immediate combat role.³³⁰ Over a period of time, the JPOTF relocated to Iraq and hence out-of- area production and dissemination of PSYOP products were minimized. The overall PSYOP campaign, during the combat phase, is quite disappointing due to two major reasons; firstly, there was a lack of effective resource utilization due to out-of-area control and coordination, and secondly, there are no quantifiable measures of effectiveness to ascertain the impact of these operations.

At present, the PSYOP campaign is in the stability phase with a demanding counter-insurgency role, and the focus of the PSYOP campaign has rightly shifted to being *people centric* and for *winning the hearts and minds*. The major themes of the PSYOP campaign are directed toward the general populace for maintaining law and order, obeying rules and regulations, the need for the

³²⁸ Christopher J. Lamb, *Review of the Psychological Operations Lessons Learned from Recent Operational Experiences* (Washington D.C.: National Defense University Press, 2005), 48.

³²⁹ Joseph L. Cox, "Information Operations in OEF and OIF: What Went Wrong?" 42.

³³⁰ Joseph L. Cox, "Information Operations in OEF and OIF: What Went Wrong?" 43

populace to be aware of mines and unexploded ordnance, to help eliminate threats to coalition forces, and to influence the civilian populace to come forward and provide the coalition forces with information and intelligence regarding key members of Saddam's Baath Party.³³¹ In the later time frame, as the Iraqi local government started taking shape, aided by the coalition forces, the dominating themes were directed toward the people for supporting the new government and the Multi National Forces: Iraq (MNF-I), support for resisting criminals, insurgents, terrorists and other violent groups, partnership between the MNF-I and Iraqi Security Forces (ISF), and threat reduction for Improvised Electronic Devices (IEDs).³³² The resources used for dissemination of these themes range from magazines, compact disks (CDs), billboards and leaflets, and media outlets like radio and television. The impact of such themes will be greater when these are disseminated through personal contacts and face-to-face interactions.

The other resources that the coalition utilized for their PSYOP campaign during this phase included producing a newspaper, *The Times*, for southern Iraq, and a British organized white PSYOP station, 'Two Rivers Radio' (Radio Nahrain), which was set up to serve the region around Basra. In fact, an extensive network of radio and television broadcasting services has now been established by the coalition forces, and in an effort to popularize them initially, there was a distribution of leaflets that gave out the frequencies of the radio station as well as radio sets to people in Iraq. Radio Tikrit is a good example of a "black propaganda" operation. It began broadcasting in early February 2003 and featured programs that depicted strong support for the Iraqi leader Saddam Hussein and his government; over the course of time, the programs began to change dramatically and adopted a more anti-Saddam stand.³³³ There are other

³³¹ Christopher J. Lamb, *Review of the Psychological Operations Lessons Learned from Recent Operational Experiences*, 54-56.

³³² United States Strategic Command, "STRATCOM Briefing to CG, Multi National Forces – Iraq," Jul 4, 2004. This document is available at the Information Operations Center at Naval Postgraduate School, Monterey, CA.

examples of the Al Iraqiya network and the Middle Eastern Television Network (METN) that have now grown to be quite acceptable in Iraq and the neighboring Middle East countries.³³⁴ The establishment of such networks is bound to provide major gains, in the long term, to the coalition forces as well as the Government of Iraq, and may play an important part in moving the Iraqi people toward stability and peace.

The other important activity during this phase was hiring media and public relations companies from the United States such as SYColeman Inc., Lincoln Group, and SAIC to develop materials for PSYOP in Iraq and elsewhere. The United States has now taken an initiative to promote its views to the rest of the Middle East community by a government funded channel, Al-Hurra, and recently, a Washington-based non-profit organization, Layalina Productions, has started producing programs in Arabic-language that are broadcast on the Saudi-owned Middle East Broadcasting Center, which is the most-watched television channel in 22 Arab countries.³³⁵ Even the former prime minister of Britain, Tony Blair, planned to set up a “joint information unit” based in the Cabinet Office or the Home Office that will seek to counter disinformation issued by Islamic terrorists and help sway Muslim hearts and minds in the battle with Al-Qaeda.³³⁶ Britain has also come out recently with the *Defense Communications Strategy* that highlights the focus of the government to demonstrate real progress in Afghanistan and Iraq through all available media outlets in order to influence

³³³ Philip M. Taylor, “PSYOPS in Iraqi Freedom” [on-line], available from <http://ics.leeds.ac.uk/papers/vp01.cfm?outfit=pmt&requesttimeout=500&folder=16&paper=20>, accessed Jul 13, 2007. Philip M. Taylor maintains an excellent website (<http://ics.leeds.ac.uk/papers/index.cfm?outfit=pmt>) at the University of Leeds, United Kingdom pertaining to resources on Information Operations and in particular PSYOP. Also see, “Radio Tikrit changes tune in Iraq,” BBC News, Feb 23, 2003 [on-line], available from http://news.bbc.co.uk/2/hi/middle_east/2791865.stm, accessed Jul 13, 2007.

³³⁴ “U.S.-funded Iraqi network challenges Arab stations,” *CNN Online*, Nov 28, 2003 [on-line], available from <http://www.cnn.com/2003/WORLD/meast/11/28/tv.war.ap/>, accessed Jul 13, 2007.

³³⁵ Martha Bayles, “Public Diplomacy, TV-Style,” *Wall Street Journal*, Feb 16, 2007, W13 [on-line], available from <http://online.wsj.com/article/SB117160004807410941.html>, accessed Jul 14, 2007.

³³⁶ David Leppard, “Blair to launch spin battalion against Al-Qaeda propaganda,” *Times Online*, Jan 28, 2007 [on-line], available from <http://www.timesonline.co.uk/tol/news/uk/article1267472.ece>, accessed Jul 14, 2007.

local as well as global audiences.³³⁷ This highlights the importance of PSYOP in a campaign that has global ramifications as part of the overall effort in the GWOT as well as a lack of expert resources in the coalition forces to undertake such a task.³³⁸ The, outsourcing of such tasks to out-of-area experts may be a good idea, but again, hiring a few media companies from Middle East countries to undertake such a task could provide a higher pay-off.

There have also been major setbacks in the PSYOP campaign, mainly due to a lack of cultural understanding of the people in the region as well as the over-exuberance of personnel in the coalition forces.³³⁹ Although the major adverse impact on the PSYOP campaign of *winning the hearts and minds* is mainly due to negative actions in the physical domain, the three prominent examples are the abuse of Iraqi prisoners at Abu Ghraib, the massacre of innocent Iraqi people at Haditha, and the fiasco during the hanging of Saddam Hussein. Such events are lapped up by the media networks worldwide and not only cause a negative impact in Iraq, but also affect people all over the world. There are also a number of minor physical actions undertaken by the coalition forces that do not make it to the news channels but have their own fallout locally. These include the daily killing of innocent people in Iraq, day-to-day hostile encounters of Iraqi people at coalition forces manned check posts, military patrols walking into people praying on the streets, kicking and storming into the

³³⁷ United Kingdom, Ministry of Defence, "The Defense Communications Strategy" [on-line], available from http://www.mod.uk/NR/rdonlyres/3D4C12DC-6A9D-4B3A-87C9-FBC903D9623C/0/def_comms_strat.pdf, accessed Jul 14, 2007.

³³⁸ "DOD Awards \$300M in PSYOPs Contracts," Jun 7, 2005 [on-line], available from <http://ics.leeds.ac.uk/papers/vp01.cfm?outfit=pmt&folder=16&paper=2397>, accessed Jul 13, 2007.

³³⁹ Brian Cloughley, "The Pentagon's Bungled PSYOPS Strategy: Iraq Isn't the Wild West, It's the Wild Middle East: the Cultures are Wildly Different," *CounterPunch Online*, Sep 3, 2003 [on-line], available from <http://www.counterpunch.org/cloughley09032003.html>, accessed Jul 13, 2007. The author cites examples of United States military officers making statements that reflect quite poorly on their cultural understanding of the region and the negative impact of such statements towards the PSYOP campaign and the overall informational environment. The "shock and awe" campaign of the coalition forces killed hundreds of innocent Iraqi civilians – this coupled with minor day-to-day incidents has led to an adverse image of the coalition forces in the minds of local population, as also in the rest of the Muslim world.

home of Iraqi civilians, harassment of Iraqi women by coalition forces, etc.³⁴⁰ It is important that coalition troops are sensitized to the impact of such small events in the physical domain that create an enormous undesirable impact in the information domain, as that is where the true *battle of hearts and minds* actually lies.

*We have broken down doors, run them off roads, swiveled our guns at them, shouted profanities at them, and disrespect their women – all this hundreds and thousands of time every day. We have dishonored them publicly, and within a society that places public honor above itself. These are the roots of the fight we are in.*³⁴¹

There are a few things that can be highlighted from the experience of the Indian military in counter-insurgency scenarios and some of the basic tenets that we follow are: we treat every soldier as a PSYOP warrior, we use a humane and just approach toward the local population in every day dealings, we deploy companies and battalions in insurgency-prone areas to adopt villages and carry out localized, small-scale and pragmatic, societal infrastructure building tasks, and we encourage local community participation. The overall approach that guides the Indian Army in such an operational scenario is '*Iron Fist and Velvet Glove*'.³⁴²

4. Public Affairs Campaign – Engaging the Fourth Estate

During OIF more than 600 journalists were deployed alongside the coalition forces as part of the “embedded media” concept. This large scale presence of journalists in the war zone was a strategy that was planned well in

³⁴⁰ Nir Rosen, “Occupation of Iraqi Hearts and Minds,” Jun 27, 2006 [on-line], available from http://www.truthdig.com/dig/item/20060627_occupation_iraq_hearts_minds/, accessed Jul 13, 2007.

³⁴¹ William Langewiesche, “Letter from Baghdad,” *The Atlantic Monthly*, Jan / Feb 2005, 95 [on-line], available from <http://www.theatlantic.com/doc/prem/200501/langewiesche>, accessed Jul 15, 2007.

³⁴² General JJ Singh, Chief of the Army Staff (Indian Army), Integrated Headquarters of Ministry of Defense (Army), foreword in the “Doctrine for Sub Conventional Operations,” Dec 2006 [on-line], available from http://indianarmy.nic.in/indar_doctrine.htm, accessed Jul 15, 2007.

advance of the conflict.³⁴³ This strategy of a public affairs (PA) campaign was directed more toward the population of the coalition forces back home rather than in Iraq, and had both its positive and negative outcomes. For the journalist community, it was a matter of pride to see and report a war “live” through their networks to a worldwide audience. There was a formal contract signed by the journalist, prior to their being embedded, that gave out the regulations that the journalists needed to conform to. In the initial phase of operations, the reporting from these embedded journalists was just what the coalition forces desired, but during the later phase, the objectivity and the ‘questioning all’ syndrome returned in the reports of the journalists was not taken in good spirits by the military commanders. There was a continuous conflict between the reporting of these embedded journalists and other journalists of the Al Jazeera network, where the embedded journalists covered aspects more from the perspective of the coalition forces. Al Jazeera, on the other hand, focused on the destruction and occupation of Iraq and the problems of the Iraqi people due to the conflict and that was what was seen and heard by a majority of the people in the Middle East.

A major aspect that was neglected by the think-tank that evolved the idea of embedded media was the fact that there was absolutely no representation of Arabic or regional journalists embedded with the coalition forces. This, in hindsight, would have had a greater impact on the regional population. Overall, the effort of the embedded media was on expected lines and these journalists modulated the information environment in a favorable manner during the initial phase of OIF.³⁴⁴ The other aspect of the coalition public relations campaign, which had a negative impact in the recent past, was the planting of stories in Iraqi newspapers.³⁴⁵

³⁴³ Howard Tumber and Jerry Palmer, *Media at War: The Iraq Crisis* (London: Sage Publications, 2004).

³⁴⁴ Joseph L. Cox, “Information Operations in OEF and OIF: What Went Wrong?” 68.

³⁴⁵ Jeff Gerth and Scott Shane, “U.S. Is Said to Pay to Plant Articles in Iraqi Newspapers,” *New York Times*, Dec 1, 2005 [on-line], available from <http://www.nytimes.com/2005/12/01/politics/01propaganda.html?ex=1291093200&en=15a816ad2c204281&ei=5088&partner=rssnyt&emc=rss>, accessed Jul 14, 2007. Also see, Mark Mazzetti and Borzou Daragahi, “U.S. Military Covertly Pays to Run Stories in Iraqi Press,” *Los Angeles Times*, Nov 30, 2005.

These actions, though undertaken without any *mala-fide* intentions, caused repercussions that ruined the information environment as well as losing its desired impact.

5. Civil Affairs and Nation-Building

The problems in civil affairs (CA) and nation-building in Iraq are a consequence of the initial response of the coalition forces toward the previous regime in Iraq. The decision to disband the Iraqi army and police, banish the former Baath party members from any of the post-government activities, along with the removal of civil servants from the Saddam era affected almost 500,000 Iraqis.³⁴⁶ This created a vacuum in the civic infrastructure that coalition forces are finding hard to fill today. The CA units, as part of the coalition forces, are tasked with rebuilding the societal infrastructure necessary for the people of Iraq, and are supported by various contractors and civilian aid agencies. The duties in many cases are quite minor like repairing schoolhouses, restoring drinking water, building shelters for the homeless, delivering fertilizer, vaccinating livestock, offering suggestions on how to better irrigate crops, advice on how to run a stock market, and shelter from an abusive spouse, etc., still have a profound impact on the people. During the 2005 elections in Iraq, CA soldiers had worked in the background for weeks, ensuring that Iraqi security could handle any violence and collect and count the ballots; this resulted in more than 80 percent of the population turning out for the country's first democratic vote in 50 years.³⁴⁷ The CA units are comprised of soldiers who are 90 percent reservists and come with a wealth of experience in civil affairs, but in situations like this there may be a case for increasing the active duty force strength of the CA units, as similar situations may arise in the near future as part of the GWOT. Another option

³⁴⁶ Thomas R. Mockaitis, "The Iraq War: Learning from the Past, Adapting to the Present and Planning for the Future," Feb 2007, Army War College, Strategic Studies Institute, Carlisle, PA, 33-35.

³⁴⁷ Wayne Woolley, "Civil Affairs Unit Mans the Army's Diplomatic Front," *The Star Ledger*, Mar 7, 2005 [on-line], available from http://www.nj.com/war/ledger/index.ssf?/news/ledger/stories/0307_woolley.html, accessed Jul 14, 2007.

would include a greater focus on CA, PA, and the impact of physical events on the information environment during training periods for all active duty units of the military.

As part of the larger nation-building process, Provincial Reconstruction Teams (PRTs) have been set up in Iraq to support civic affairs actions in different regions of the country. *The PRT initiative is a civil-military effort that is becoming the primary interface between the United States, coalition partners, and provincial governments throughout Iraq. The PRTs are helping provincial governments by developing a transparent and sustained capability to govern, promoting increased security and rule of law, promoting political and economic development, and providing a provincial administration necessary to meet the basic needs of the population.*³⁴⁸ This initiative began as a consequence of similar structures that have been created in Afghanistan, and the first PRT was set up in Ninewa on November 14, 2005.³⁴⁹

Another initiative began on January 25, 2004, with the formation of Gulf Region Division (GRD). The GRD consists of members of the initial task force teams who specialize in oil and electricity, as well as forward engineering support teams operating throughout the theater to assess projects, develop courses of action, and initiate contracts during the early days of the reconstruction effort in Iraq. It is comprised of both military and civilian staff. The purpose of GRD is to provide quality, responsive engineering services in the Iraq combat theater to MNF-I and the Interim Iraqi Government with planning, design, and construction management support for military and civil infrastructure construction. The GRD looks after the major reconstruction projects like hospital renovation and construction, primary healthcare facilities, municipal buildings and schools, water

³⁴⁸ Embassy of the United States in Baghdad, "Fact Sheet on Provincial Reconstruction Teams (PRTs)," Nov 14, 2006 [on-line], available from http://iraq.usembassy.gov/iraq/20060223_prt_fact_sheet.html, accessed Jul 14, 2007.

³⁴⁹ Polli Keller, "Condi Rice Stands up First PRT in Iraq," *Army New Service*, Nov 14, 2005 [on-line], available from <http://www.globalsecurity.org/military/library/news/2005/11/mil-051114-arnews01.htm>, accessed Jul 14, 2007.

and wastewater treatment facilities, police stations and border forts, electrical power generation and distribution, roads, sea, and airports.³⁵⁰

The coalition forces' efforts in CA and nation-building will definitely benefit the people of Iraq and will impact the overall information environment in a positive manner, but again, these reconstruction efforts and their perceived impact takes time and will test the resilience of the overall coalition effort in Iraq. The overall achievements of these efforts for many Iraqis *are either too little or too late or both, and have created cynicism, animosity, enmity, and worse*.³⁵¹

6. The Other Elements of Information Operations

EW as an element of information operations was utilized by the coalition forces during the initial phase of the operation in a more conventional role: suppression of enemy air defenses, and jamming of communication systems, radio and television stations. It also did a favorable job of shaping the battlefield during that time. In the present context, EW airborne assets are being used to try to counter the IEDs threats from terrorists and insurgents, but it is not an effective method since it has a secondary impact on own systems operating in the common spectrum band. There is, therefore, a definite requirement for having ground-based assets in this scenario to provide close tactical support. The United States Army is in the process of scaling up its efforts in the field of EW and the *Iraq War has proved to be the mother of invention for U.S. Army EW*.³⁵² The United States Army's new approach to EW represents a bit of a turnaround. Whereas this area was completely neglected a few years back, now the United

³⁵⁰ Gulf Region Division Website - <http://www.grd.usace.army.mil/>. Also information on GRD is available at the official website of the MNF-I at <http://www.mnf-iraq.com>.

³⁵¹ Bruce Hoffman, "Insurgency and Counterinsurgency in Iraq," 105.

³⁵² Robert K. Ackerman, "Iraq Hones Army Electronic Warfare," *Signal: AFCEA's International Journal*, Jun 2007 [on-line], available from http://www.afcea.org/signal/articles/templates/Signal_Article_Template.asp?articleid=1328&zoneid=209, accessed Jul 14, 2007. Also see, Carl S. Ey, "Army Initiates Electronic Warfare Capability", *Army.mil News*, Dec 7, 2006 [on-line], available from <http://www.army.mil/-news/2006/12/07/889-army-initiates-electronic-warfare-capability/>, accessed Jul 14, 2007. Also see, Joseph R. Pitts, "Making Up for Lost Time: The Army is stepping up to fill a critical gap in EW Training", Electronic Warfare Working Group, Apr 24, 2007 [on-line], available from <http://www.house.gov/pitts/initiatives/ew/Library/Briefs/brief22.htm>, accessed Jul 14, 2007.

States Army has *dedicated EW as a core competency*. The importance of a robust EW infrastructure that supports operations by troops in a counter-insurgency scenario has now been acknowledged, from its use in anti-IEDs operations to carrying out surgical jamming and monitoring of insurgent radio communications. Another operation wherein EW can be utilized in the present scenario is for *Electronic Intruder Operations*, wherein insurgent communication networks can be intruded through electronic means to undertake tactical and operational level misinformation and deception campaigns.

Cyber Warfare during OIF was apparently limited in use, although prior to the commencement of combat operations in Iraq, there were news reports of the *launch of a fierce cyber war* by the United States.³⁵³ An active email campaign was definitely used during OIF, but the same cannot be termed a constituent of classic cyber warfare, and can be regarded more as part of PSYOP, unless the emails contained a *Trojan* to provide a back-door access, or any other software capable of destroying the data on Iraqi information systems. There has been a report that the United States did consider launching cyber attacks for disabling the banking and finance system in Iraq, but the idea was eventually negated due to its likely impact on other financial systems around the world.³⁵⁴ There was also mention of United States cyber warriors hacking into Iraq's Kari and Tiger Song air defense networks, but whether that took place is not known in the public domain.

Another aspect that could be exploited in the cyber domain is the conduct of *Cyber Intruder Operations*, which are similar to Electronic Intruder Operations. This is due to the fact that large numbers of terrorists and insurgents in Iraq, and elsewhere in the world, actively use the Internet for communication and collaboration. Cyber Intruder Operations would imply a planned surgical

³⁵³ "Fierce Cyber War Predicted: Strides in Technology Magnify Info War Potential, CNN Online, Mar 3, 2003 [on-line], available from <http://www.cnn.com/2003/TECH/ptech/03/03/sprj.iqr.info.war.ap/index.html>, accessed Jul 14, 2007.

³⁵⁴ Charles R. Smith, "Cyber War Against Iraq: U.S. Information Warriors Wrestle With New Weapons," Newsmax Online, Mar 13, 2003 [on-line], available from <http://www.newsmax.com/archives/articles/2003/3/12/134712.shtml>, accessed Jul 14, 2007.

operation to infiltrate the cyber world of these terrorists for information gathering and apprehension of such elements, and could also include designing tailor-made honey-pots and honey-nets to attract the *Jihadi* elements.

B. INFORMATION OPERATIONS FROM THE PERSPECTIVE OF ANTI-COALITION FORCES IN IRAQ

The initial resistance to the United States coalition forces by the Iraqi military under the Saddam Hussein regime was almost non-existent. This was mainly due to the fact that the Iraqi military, since 1991, was continuously degraded by the United States and British air forces, coupled with the effects of sanctions and no worthwhile air force capability.³⁵⁵ Suffice it to say that the conventional challenge to the coalition forces, in any aspect of warfare, was neither demonstrated by the Iraqi leadership nor its military. After the launch of combat operations, Iraq's information minister, Muhammad Said al-Sahaf, conducted his daily briefings in Baghdad to inform the Iraqi people about the success of the Iraqi military and the failures of the coalition forces; but then there was no visible impact on the information environment due to the speed of the coalition forces reaching Baghdad. Saddam Hussein created three militia organizations: the Saddam Fidayeen, the al Quds Army, and the Baath Party militia and these organizations consisted of motivated Iraqi Sunnis. Although created with a view to protect Iraq from invasion, these militias could do very little in the conventional spectrum of the conflict, but adapted themselves by dispersing into the population and led Iraq toward the path of insurgency and violence that exists today. The other opposing force that has emerged in Iraq is Al Qaeda and its affiliates. Although there has been a growing debate over the linkages between Saddam Hussein and Al Qaeda prior to the United States-led

³⁵⁵ Kevin Woods, James Lacey, and Williamson Murray, "Saddam's Delusions: The View From the Inside," *Foreign Affairs*, May/June 2006.

invasion, it was one of the premises for undertaking the war, and in the present context, the presence of Al Qaeda in Iraq has become an important factor.³⁵⁶

1. Information Operations Campaign by Insurgents and Al Qaeda in Iraq

The insurgency in Iraq began because of the vacuum that was created by the total collapse of domestic political authority and the large scale looting seen in Baghdad. The actual insurgency that began in the later part of 2003 occurred for three major reasons. Firstly, Saddam Hussein planned to fight this way. Secondly, the general population of Iraq resented the United States-led forces and always saw them as *occupiers*. Thirdly, Al Qaeda saw this as an opportunity to engage and bleed the United States, which was well aligned with their strategic goals. Soon the insurgency became more violent with a Shia-Sunni backdrop, and is now comprised of a large number of Islamist terrorists who hold some form of allegiance to Al Qaeda. The situation in Iraq, therefore, is comprised of loosely networked insurgent operators acting more or less independently without any proper command and control or coordination, but capable of causing grave damage to the surrounding environment through use of the asymmetric tactics of suicide bombing, roadside IEDs, car bombings, or remotely triggered explosions in public places. As Brian Michael Jenkins said, *“The Iraqi insurgency today comprises a shifting host of as many as 70 disparate groups that increasingly have coordinated their attacks. It is made up of diehard supporters of the old regime reassembled, joined by growing numbers of Iraqi and foreign fighters who see Iraq as a new front for holy war against America and*

³⁵⁶ Walter Pincus and Dana Milbank, “Al Qaeda-Hussein Link Is Dismissed,” *Washington Post*, Jun 17, 2004; Page A01 [on-line], available from <http://www.washingtonpost.com/wp-dyn/articles/A47812-2004Jun16.html>, accessed Jul 14, 2007. Also see, Sam Dagher, “US draws new Iraq-Al Qaeda Link: The US military says it caught the man who ties Osama bin Laden's network to Iraq,” *The Christian Science Monitor*, July 19, 2007 [on-line], available from <http://www.csmonitor.com/2007/0719/p01s05-wome.html>, accessed Jul 20, 2007. President Bush has been quite vehemently defending the point that there was a link between Al Qaeda and Iraq even prior to the invasion. See, the article – Dana Milbank, “Bush Defends Assertions of Iraq-Al Qaeda Relationship,” *Washington Post*, Jun 18, 2004; Page A09 [on-line], available from <http://www.washingtonpost.com/wp-dyn/articles/A50679-2004Jun17.html>, accessed Jul 14, 2007.

other “infidel” nations.³⁵⁷ The present insurgency in Iraq, as highlighted by Bruce Hoffman is *a manifestation yet of netwar*,³⁵⁸ the concept as promulgated by Arquilla and Ronfeldt, which involves “*small groups who communicate, coordinate, and conduct their campaigns in an Internetted manner, without any precise central command.*”³⁵⁹ And to tackle such a manifestation, there is a requirement for using small teams that are equally nimble and mobile, backed up by precise technological assets and a network of HUMINT operators to hunt down and neutralize these insurgents.

The information campaign of the insurgents and the Al Qaeda terrorists in Iraq consists mainly of terrorizing people, highlighting the inadequacy of the coalition forces, and carrying out attacks on coalition troops through suicide and roadside IEDs. These activities are coupled with a mass media campaign that includes recording of these events and then distributing the media package over the Internet and Middle East television networks to a worldwide audience.

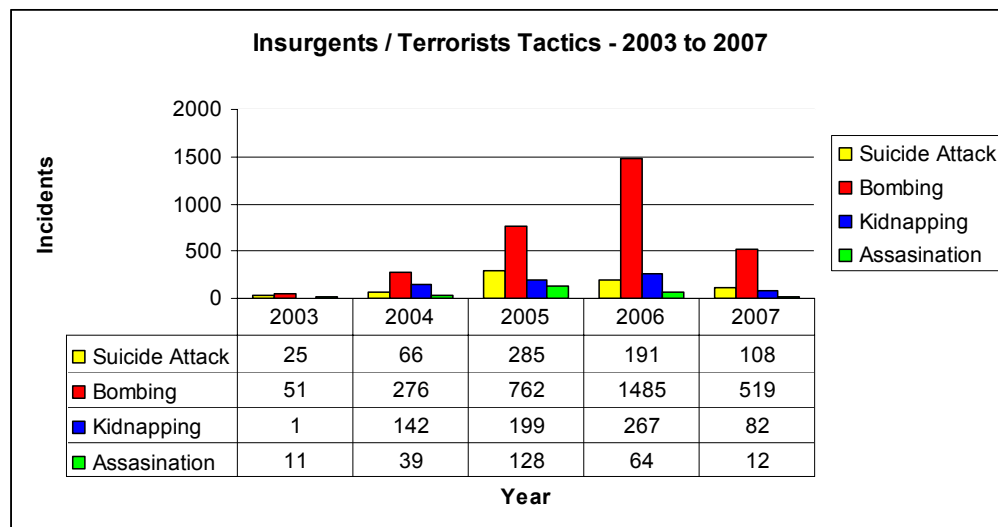


Figure 10. Insurgent/Terrorist Tactics in Iraq: 2003 to 30 July 2007.³⁶⁰

³⁵⁷ Brian Michael Jenkins, “Can the Iraq Beast Be Tamed?” *Boston Globe*, May 18, 2005.

³⁵⁸ Bruce Hoffman, “Insurgency and Counterinsurgency in Iraq,” 115.

³⁵⁹ John Arquilla, David Ronfeldt and Michele Zanini, “Networks, Netwar, and Information-Age Terrorism,” 47.

³⁶⁰ Memorial Institute for the Prevention of Terrorism (MIPT) Terrorism Knowledge Base [online], available from <http://www.tkb.org/AnalyticalTools.jsp>, accessed Jul 31, 2007.

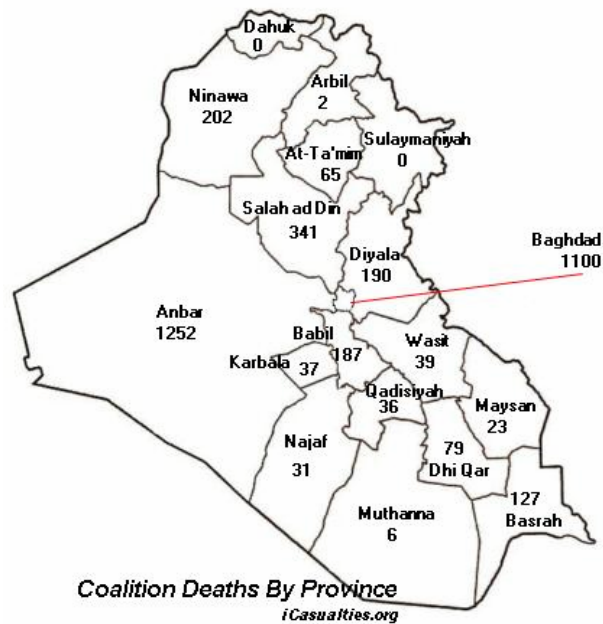


Figure 11. Total Coalition Forces Casualties by Province: 2003–June 2007.³⁶¹

Figure 10 indicates the dominant tactics used by insurgents/terrorists in Iraq. Bombing in this case includes IED attacks as well as truck/car bombing. The assassination tactics were high during the year 2005 as this was a time of intense political activity in Iraq that included: the conduct of elections in January, appointment of the president and the vice presidents, and the drafting and acceptance of the new Iraqi constitution. The insurgents and terrorists understood modulation of the information environment in the context of the political activity, which was evident by their targeting of government officials and people involved with the government machinery. Consequently, the assassination attempts have declined and emphasis is now on bombing and suicide attacks with the aim of ensuring chaos and instability. Figure 11 clearly highlights that Anabar and Baghdad are the most active regions in Iraq in terms of insurgent and terrorist activity. Hence, the future casualty figures in these two regions may be set as benchmarks for evaluating the situation in Iraq.

³⁶¹ The figure has been taken from the casualties database of coalition forces maintained by the website – www.icasualties.org [on-line], available from <http://icasualties.org/oef/>, accessed Jul 2, 2007.

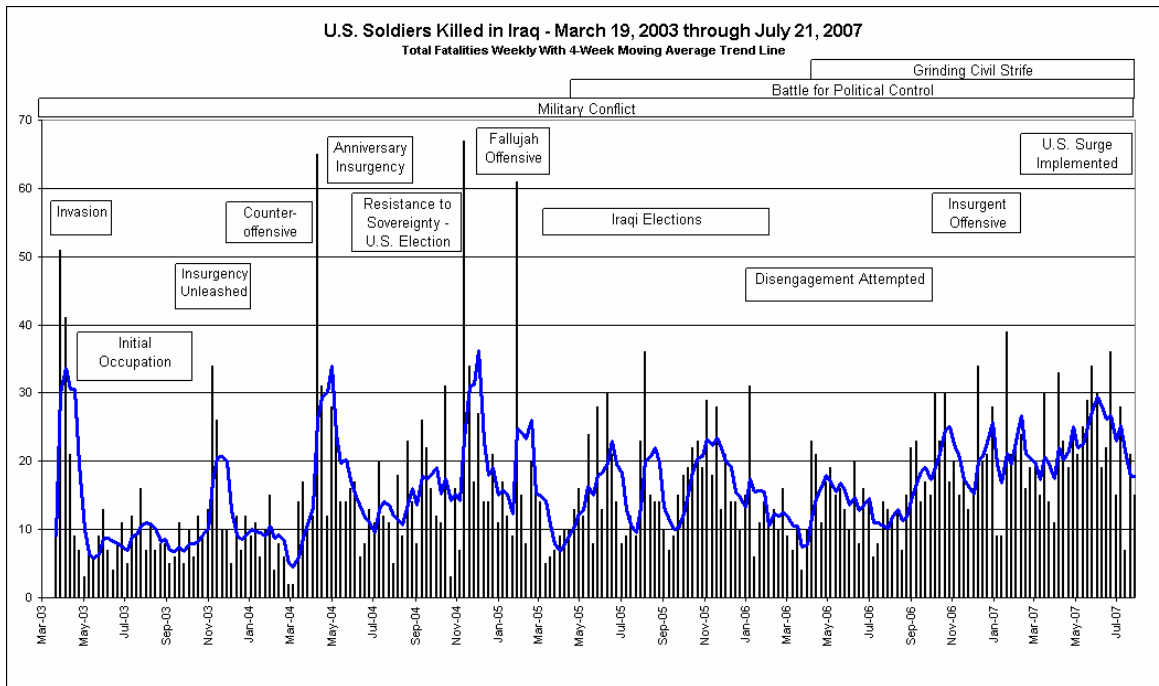


Figure 12. United States Casualties Trend in Iraq: 2003–June 2007.³⁶²

At the strategic level, Al Qaeda utilizes video recordings and audio messages from Osama bin Laden and Ayman Al Zawahiri to influence operations within Iraq as well as acting as a source of inspiration for other Islamist terrorists around the world. The chaos in Iraq, lack of security, and the increase in day-to-day problems for the Iraqi people due to the United States' invasion are major themes used by the Al Qaeda leadership. The larger Al Qaeda goal of trying to depict the presence of coalition forces in Iraq as a *Crusader-Zionist coalition against the Islamic nation*³⁶³ is also a major theme that is utilized.

³⁶² The figure has been taken from the casualties database of coalition forces maintained by the website – [www.icasualties.org](http://icasualties.org) [on-line], available from <http://icasualties.org/oef/>, accessed Jul 2, 2007. The website highlights that the *Current Cycle of High Fatality Rates is coming to a close, with the Fatality Trend Line below 20 for the first time since Mar 2007*. The website further predicts that incase the trend line continues its downward trend then the “surge in troops” may be taken as a successful strategy.

³⁶³ Statement of Osama bin Laden, Dec 27, 2004 published by MEMRI Special Dispatch Series – No. 837 [on-line], available from <http://memri.org/bin/articles.cgi?Page=archives&Area=sd&ID=SP83704>, accessed Jul 16, 2007.

*What is the difference between the massacre by the tyrant Saddam[Hussein] at Halabja and the massacre by Bush at Fallujah? If Saddam killed there [at Halabja] a few thousand of our Kurdish brothers in the name of the odious nationalism, the pharaoh of this era [i.e. Bush] killed only at Fallujah a few thousand, and wounded and crippled twice as many, in addition to expelling and terrifying hundreds of thousands – and all this in the name of the bloodthirsty Zionist Crusade.*³⁶⁴

— Osama bin Laden, 2004

At the beginning of the insurgency in Iraq, the insurgents and Al Qaeda affiliates used the local Middle East television network of Al Jazeera and Al Arabiya to broadcast their messages. This was facilitated by video and audio tapes sent covertly to these agencies, or by an interview given to the reporters affiliated with these agencies. In due course, there was a considerable amount of pressure on the two news networks, and over a period of time, the content disseminated has been modulated. The insurgents and Al Qaeda affiliates now resort to their own independent and covert media production agencies that are capable of producing sophisticated videos and audio messages that are then disseminated over the Internet. The recent report by Radio Free Europe/Radio Liberty titled “*The Iraqi Insurgent Media: The War of Images and Ideas*,”³⁶⁵ highlight four important issues. Firstly, the Sunni insurgents in Iraq and their supporters worldwide are exploiting the Internet to pursue a massive and far-reaching media campaign that is forming perceptions of the war in Iraq among the best-educated and most influential segment of the Arab population. Secondly, the Iraqi insurgent media network is a boon to the global jihadist media as it can use the same material to reinforce its message. Thirdly, the insurgent propaganda network does not have a headquarters, bureaucracy, or a brick-and-mortar structure; rather, it is decentralized, fast-moving, and technologically adaptive. Fourthly, there is little to counter this torrent of daily press releases,

³⁶⁴ Statement of Osama bin Laden, Dec 27, 2004.

³⁶⁵ Daniel Kimmage and Kathleen Ridolfo, “Iraqi Insurgent Media: The War of Images and Ideas,” Radio Free Europe/Radio Liberty [on-line], available from <http://realaudio.rferl.org/online/OLPDFfiles/insurgent.pdf>, accessed Jul 16, 2007. This is an excellent report that contains in depth analysis of the use of media and the Internet by Sunni insurgent organizations in Iraq.

weekly and monthly magazines, books, video clips, full-length films, and even television channels. The report also points out two vulnerabilities, a lack of central coordination with a resulting lack of message control, and a widening rift between homegrown nationalist groups and Al Qaeda-affiliated global Jihadists. In order to counter this strategy, there is a need to exploit the Internet, provide technology that will either prevent or deny the use of the Internet for such activities, and use technologically adaptive and decentralized organizations that are geographically independent to undertake a counter campaign of this magnitude.

The following figures, 13 and 14, depict the types of statements issued by various insurgent groups in Iraq in March 2007. The two figures indicate that Al Qaeda is not “the” dominant group in Iraq and that the majority of the statements are being directed more toward the Iraqis than the coalition forces.

Breakdown of statements issued by Iraqi insurgent groups in March 2007 on World News Network and Mohajroon*									
Group	Operations against U.S. forces	Operations against Iraqi government forces	Operations against Shi'ite groups and militias	Operations against Kurdish targets	Mixed operations	Composite operational statements**	Publication announcements (audio, video, and text)	Topical statements	Totals
IAI	80	105	47	0	9	6	1	1	249
Mujahidin Army	132	4	0	0	0	2	2	1	141
1920 Revolution Brigades***	0	0	0	0	0	0	0	3	3
ISI/Al-Qaeda	13	40	3	6	9	74	0	15	161
Jihadist Brigades of Iraq	8	4	0	0	0	0	0	0	12
Ansar al-Sunnah	44	90	37	6	3	2	5	4	192
IAMI	13	0	0	0	1	0	13	1	14
Jaysh al-Rashidin	26	0	0	0	1	0	4	1	32
Just Recompense Brigades	0	15	11	0	0	0	0	0	26
Shield of Islam	20	37	30	0	0	0	0	0	87
Jaysh al-Fatihin	21	0	15	0	2	0	0	1	39
Totals	357	296	143	12	25	83	25	28	
<p>*It should be stressed that the breakdown tells us about the media impression insurgent groups created in March 2007 with their statements rather than the actual activities they may have carried out during the month. Moreover, a lag of several days sometimes occurs between the date of a claimed operation and the date of a press release. As a result, statements issued in March 2007 described operations carried out roughly from late February through late March.</p> <p>**Operations described in composite statements were not included in the breakdown of operations provided in the first three columns of this table, which is intended to convey the overall impression statements would make on a visitor to the forum(s) where they were posted, rather than provide an exhaustive analysis of all claimed operations.</p> <p>***The 1920 Revolution Brigades posts fewer statements than other insurgent groups. While the lack of statements by the group in the above chart reflects information available on the two websites used to collect the sample, statements by the group are available on other websites.</p>									

Figure 13. Statements Issued by Iraqi Insurgent Groups in March 2007.³⁶⁶

³⁶⁶ Daniel Kimmage and Kathleen Ridolfo, “Iraqi Insurgent Media: The War of Images and Ideas,” 10.

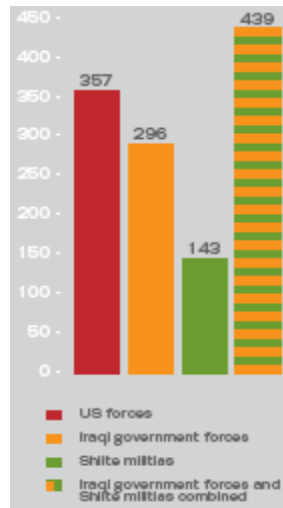


Figure 14. Insurgent Statements Claiming a “Single Operation.”³⁶⁷

The Al Qaeda affiliates in Iraq have also quite vividly understood the impact of their attacks in Iraq on the public and politics in the United States; with each attack and each death of a coalition force member in Iraq there appears to be a growing debate in the United States about the efficacy of the war in Iraq. As Jim Saxton, a Republican writing in the *Washington Times* highlights, “*Finally, what American family looks forward to the daily news of the results of another IED attack, the downing of an American helicopter, or a truck bombing at a U.S. military post? None do. Each of these acts carried out by an inferior enemy are intended to send a message to every home -- and political leader -- in the United States.*”³⁶⁸ Al Qaeda has correctly identified the center of gravity of the coalition forces in Iraq as public opinion in the United States, which they believe will assist them in succeeding in their war against the *Crusaders*.

C. SUMMARY OF INFORMATION OPERATIONS IN IRAQ

The initial *blitzkrieg* of the coalition force in Iraq bowled over the shaky Iraqi military, but thereafter the *invaders* became embroiled in a sharp insurgency. This pattern provides a contrasting dimension to the spectrum of

³⁶⁷ Daniel Kimmage and Kathleen Ridolfo, “Iraqi Insurgent Media: The War of Images and Ideas,” 9.

³⁶⁸ Jim Saxton, “Al Qaeda’s Weapon of Mass Influence,” *Washington Times*, Feb 26, 2007.

information operations between the two different enemies and the coalition forces. Some of the important aspects in the domain of information operations in Iraq are summarized in the following paragraphs. There is also a need to focus on public opinion regarding the Iraq war, since the people are the actual *information arbiters* and their views and perceptions do shape the overall information environment.

1. Summary of Information Operations – Coalition Forces vs Anti Coalition Forces in Iraq

The following Table (Table 7) summarizes the initial phase of the operation between the coalition forces and the Iraqi military up until the capture of Baghdad. The organizational adaptation of the coalition forces, in terms of using conventional resources and integrating it with superior technology was an advantage, but on the other hand, the *melting away* of the Iraqi military in the face of a superior conventional force, and planning and executing a guerrilla war, was a much more powerful move. In this phase, the coalition forces were at a much greater advantage in terms of intelligence, EW, PSYOP, and carrying out actual physical attacks on the limited Iraqi military targets that they could locate.

	Coalition Forces	Iraqi Military
Organizational Adaptation	+	++
Intelligence	++	--
Electronic Warfare	++	--
Psychological Operations	++	+
Civil Military Operations and Nation Building	Not considered in the phase	
Physical Attacks	++	--

Table 7. Comparative Analysis in Information Operations – Coalition Forces and Iraqi Military.

The situation dramatically changes in the context of the ongoing insurgency (Table 8). The Iraqi insurgents, organizationally, are seen to be with the initiative and are seen as constantly adapting and networking, whereas the coalition forces have become more hierarchical and take a longer time to adapt to the insurgent tactics, mainly due to the forces being bulky. In the case of intelligence, the coalition forces and their activities are totally visible to the insurgents with the insurgents using an adhoc HUMINT network. The ability to identify and locate an insurgent will always remain a problem for the coalition forces in this scenario. The battle in the EW domain is ongoing in the fields of using electronic signals to detonate an IED by the insurgent, and for the coalition forces to deny this ability to them. The adaptive nature of IED attacks in Iraq, by the insurgents, is quite remarkable: cell phones, garage door openers, a child's radio-controlled toy, or a vehicle-based IED, are just some of the methods used as electronic signal based triggering devices. On the other hand, the coalition forces' use of counter measures include: electronic jammers, radars, X-ray equipment, robotic explosive ordnance disposal equipment, physical security

equipment, and armor for vehicles and personnel.³⁶⁹ The other aspect of EW is the ability of coalition forces to identify, monitor, and locate insurgent radio transmissions that lead to greater actionable intelligence at the tactical level. Insurgents appear to be at an advantage in the domain of PSYOP and physical attacks. The physical attacks by the insurgents, though they appear quite random, over a period of time, they appear to have a motive. The attacks relate to the current situation in Iraq (e.g., assassination of government officials during 2005) and contribute toward the degradation of the security environment in Iraq. CA and nation-building are the only aspects where coalition forces are at an advantage. The overall information environment at present seems to be more favorable toward the insurgents.

	Coalition Forces	Iraqi Insurgents
Organizational Adaptation	-	++
Intelligence	+	++
Electronic Warfare	+	++
Psychological Operations	+	++
Civil Military Operations and Nation Building	+	-
Physical Attacks	-	++

Table 8. Comparative Analysis in Information Operations – Coalition Forces and Iraqi Insurgents.

³⁶⁹ Clay Wilson, "Improvised Explosive Devices (IEDs) in Iraq and Afghanistan: Effects and Countermeasures," *CRS Report to Congress*, Order Code RS22330, Sep 25, 2006 [on-line], available from <http://research.fit.edu/fip/documents/SecNews1.pdf>, accessed Jul 28, 2007.

2. Information Environment and the Public Opinion – Is the United States Concerned?

The Information environment as previously discussed in Chapter II is ‘*The aggregate of individuals, organizations, and systems that collect, process, disseminate, or act on information.*’ Authors Jacob Shamir and Michal Shamir in their book *The Anatomy of Public Opinion*, opine that public opinion consists of the information environment and that it does not indicate only the numbers and the associated quantitative values, but also the information environment in which it is found, and that the dynamic nature of public opinion is influenced by the surrounding and ever-changing information environment.³⁷⁰ For this reason, the value of public opinion to define the information environment and vice versa is immense.

The polls conducted in Iraq for WorldPublicOpinion.org by the Program on International Policy Attitudes (PIPA) in September 2006 suggests that the United States’ presence in Iraq is seen as a negative, that there is a growing confidence towards the ISF, and that 61% of respondents overall approve of attacks on the United States-led forces (see Figure 15).

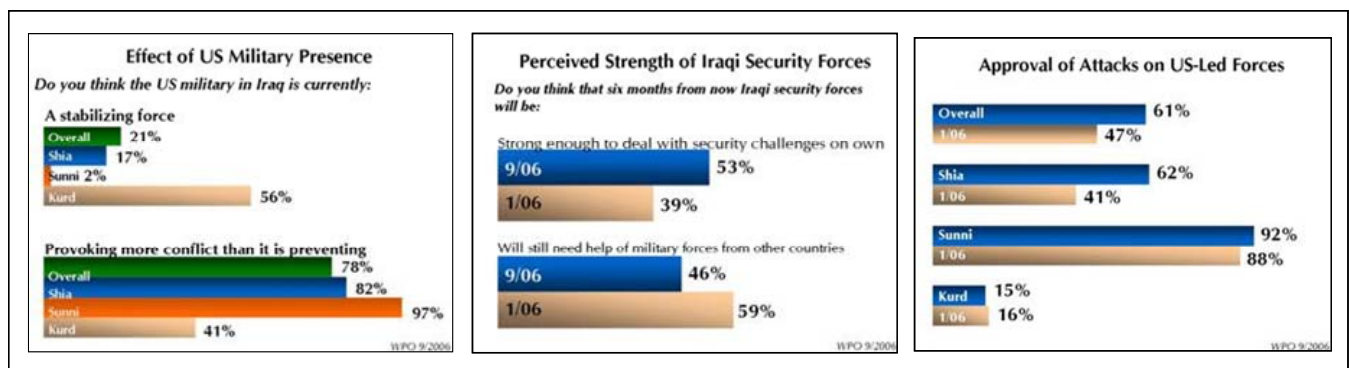


Figure 15. Polls in Iraq in 2006.³⁷¹

³⁷⁰ Jacob Shamir and Michal Shamir, *The Anatomy of Public Opinion* (Ann Arbor: University of Michigan Press, 2000).

³⁷¹ Program on International Policy Attitudes (PIPA) Poll for WorldPublicOpinion.org, “Most Iraqis Want U.S. Troops Out Within a Year,” Sep 27, 2006 [on-line], available from <http://www.worldpublicopinion.org/pipa/articles/brmiddleeastnafrica/250.php?nid=&id=&pnt=250&lb=btis>, accessed Jul 30, 2007. Full report is available from http://www.worldpublicopinion.org/pipa/pdf/sep06/Iraq_Sep06_rpt.pdf.

The comparison of polls conducted in Iraq by a different organization, Oxford Research International, in February 2004 and November 2005 (see Figure 16), on the question of supporting the coalition forces in Iraq, showed the number of supporters going down over a period of 18 months.

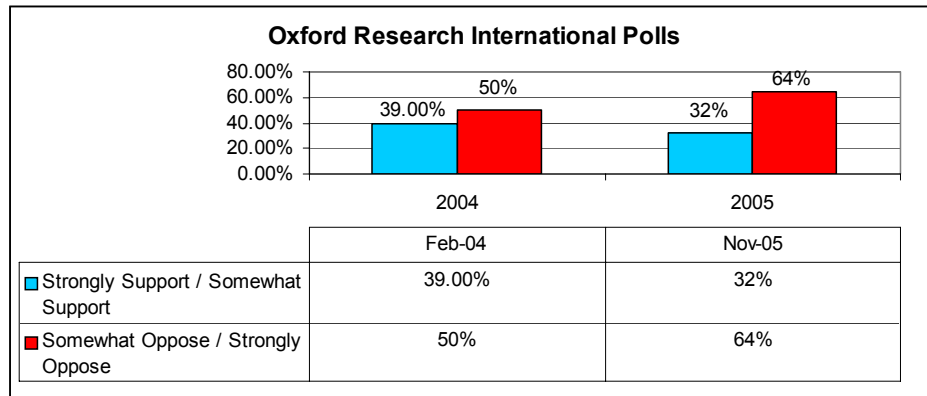


Figure 16. Polls in Iraq in 2004 and 2005.³⁷²

The global opinion of the operations in Iraq and its implications on the GWOT, as well as on the global security environment, is highlighted by a recent poll conducted by PIPA, wherein the people of 33 out of a total of 35 countries surveyed feel that the Iraq war has increased the likelihood of terrorist attacks around the world (see Figure 17).

³⁷² The data has been taken from the polls conducted by Oxford Research International in Iraq in Feb 2004 and Nov 2005. The reports are available at http://news.bbc.co.uk/nol/shared/bsp/hi/pdfs/15_03_04_iraqsurvey.pdf and http://news.bbc.co.uk/2/shared/bsp/hi/pdfs/12_12_05_iraq_data.pdf, accessed Jul 30, 2007.

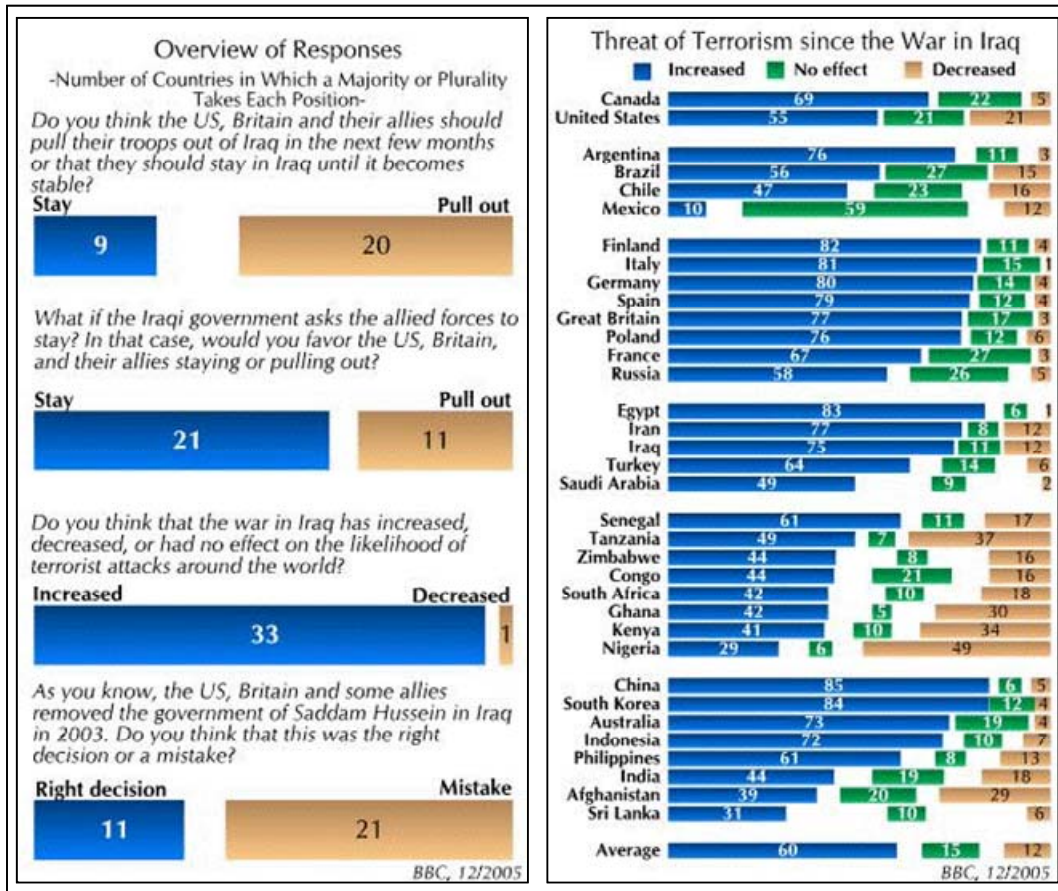


Figure 17. World Opinion on the Iraq War and GWOT.³⁷³

3. Concluding Remarks

In all the information strategies adopted by the coalition forces to moderate and modulate the information environment at the strategic level, the focus on diplomacy and a vigorous campaign for greater international engagement is not visible. The recent talks between the United States Ambassador in Iraq and his Iranian counter-part, and the initiative of the former prime minister of Britain nominated as the emissary to the Middle East are

³⁷³ The poll of 41,856 people was conducted for the BBC World Service by the international polling firm GlobeScan together with the Program on International Policy Attitudes (PIPA) at the University of Maryland. The 35-nation fieldwork was coordinated by GlobeScan and completed between October 2005 and January 2006. Article is available from http://www.worldpublicopinion.org/pipa/articles/home_page/172.php?nid=&id=&pnt=172&lb=hmpg1, accessed Jul 31, 2007.

important steps. Though delayed, they will definitely assist in moderating the information environment at the strategic level, and if successfully prosecuted will have its impact on the GWOT.

The other aspect is that due to the war in Iraq, there is a possibility of losing focus on the GWOT. The efforts and resources of the coalition forces in respect to the information operations are needed equally at other places. Iraq should not become a conflict that allows Al Qaeda and other Islamist terrorists to hone their strategy, improve their skills, re-establish themselves, and move forward again on the growth curve.

VI. INFORMATION OPERATIONS IN PURSUIT OF TERRORISTS

It is said that if you know your enemies and know yourself, you will not be imperiled in a hundred battles; if you do not know your enemies but do know yourself, you will win one and lose one; if you do not know your enemies nor yourself, you will be imperiled in every single battle.

— Sun Tzu³⁷⁴

It is imperative, in this asymmetric battle against terrorists, that their strategy and tactics be studied in terms of vulnerabilities and strengths so that we can formulate an approach to counter them. From the previous discussions, it is clear that terrorists are using the elements of information operations, duly tailored to their specific requirements, to perpetrate their ideology, carry out grave physical damage, and, in fact, hold the entire world at risk. The situation has become quite complex as the doctrines and concepts of our militaries are rooted with “conventional” armies in mind as the enemy, which limits our abilities to fight an amorphous and adaptive enemy. The impact of the activities of terrorists in the information domain is significant as even a small physical event can cause an upheaval in the strategic level information environment.

The entire spectrum of information operations has in some sense become *everything* and *nothing* at the same time. At the strategic level, political leaders and military commanders are grappling with the idea of integrating the entire spectrum of information operations into the domain of military force, and at the tactical level, soldiers are often unaware of specific elements of information operations that need to be focused on in their area of combat. The main effort in this chapter is to simplify a few things about information operations in general, provide key elements that need to be kept in mind while battling against an asymmetric foe, and propose a strategy that may modulate the present-day information environment against the terrorists.

³⁷⁴ Wikiquote Website, “Sun Tzu Quotes” [on-line], available from http://en.wikiquote.org/wiki/Sun_Tzu, accessed Jul 27, 2007.

A. COMPARING INFORMATION OPERATIONS – THE AFGHANISTAN AND IRAQ WARS

1. Libicki's Mosaic of Forms and Global War on Terrorism

Martin Libicki, in his paper on information warfare, categorized the elements based on their utilization in four forms of warfare: *Real*, *Arguable*, *Potential* and *Unlikely*;³⁷⁵ the idea was to define which elements fall into the domain of warfare with respect to their impact at the time. The Libicki approach to information warfare was in fact state-centric and in the context of the Global War on Terrorism (GWOT), the constructs appear to vary. The idea behind the analysis is to identify focus areas within the domain of information operations that are likely to have a greater impact in the GWOT so that there is a better use of effort.

In the context of the GWOT, Command and Control Warfare (C2W) consists of anti-Head and anti-Neck operations. The anti-head operations can be equated to the search for Osama Bin Laden and the other top leadership of Al Qaeda, and the anti-neck operations would include the capability to sever the communication linkages between the terrorists and their organizations. In this case, however, communication linkages such as the Internet, commercial cellular and telephone networks, are not explicitly defined, and in any case, cannot be crippled due to an unacceptable level of collateral damage. C2W, as visualized by Libicki, may not be successful against a networked terrorist organization and will have diminishing returns. This is mainly because the command structures of networked terrorist organizations are constantly adaptive in nature. The rise of networked organizations has undermined C2W. For this reason, in the case of C2W, only anti-Head may fall into the category of *Real* war with respect to the GWOT.

Intelligence Based Warfare (IBW) forms a large part of the GWOT. Although Offensive IBW makes sense, Defensive IBW has no meaning since terrorist organizations have no capability to spoof the sophisticated sensors

³⁷⁵ Martin Libicki, "What is Information Warfare?"

through commensurate technical means. On the other hand, the terrorists do use non-technical means of camouflage and deception to outwit the sensors.

Electronic Warfare (EW) categories as highlighted by Libicki, anti-radar, and cryptography, do not see any use from the coalition forces' perspective, but anti-communication is definitely a part of the GWOT. Anti-communication needs to be seen from the entire spectrum of the EW process—identify, monitor, locate and jam; and this aspect of communication EW had been previously neglected by the coalition forces. EW will also be used for anti-Improvised Electronic Devices (IED) operations that can be based on different platforms to provide appropriate coverage and depth. The terrorists too are integrating publicly available forms of crypto techniques to mask and hide their message content over commercial communication channels like the Internet and voice telephony networks.

Psychological Operations (PSYOP), directed toward the commander, has little use since the terrorist leadership is too well motivated to be swayed from its cause. PSYOP directed toward the *foot soldiers* may not be too effective due to their level of commitment and motivation. But PSYOP against the national will and culture are two important things that could effectively be used to moderate the environment where some form of terrorism has found a base; this could help uproot the terrorists from their support structures. Hence, in the strictest sense, national will may be an incorrect term to use, and it could be called *local* or *regional will*. Counter-terror PSYOP should have a greater focus on cohesive strategy.

Since there are no dedicated information systems with the terrorists, and as they tend to use more personal information resources such as laptops, desktops, facsimile machines, etc., offensive hacker warfare on the scale that Libicki describes, cannot be undertaken as part of the GWOT. Nevertheless, there is a need to focus on specific surgical operations in this domain in order to intercept and monitor terrorist communications, command and control directives, financial transactions, front organizations and their dealings, etc. Also, offensive

hacker warfare can be targeted toward state sponsoring, sheltering, or providing a base for terrorist organizations with the aim of profiling and monitoring their activities. Defensive hacker warfare is important since it is foreseen that in the future, terrorists may acquire the capability to cause damage to developed world information systems.

Libicki's notion of economic information warfare, in terms of information blockade and information imperialism, may not apply directly to the terrorists and their organizations, but would apply to a state that is sponsoring terrorism or sheltering terrorists. This is still entirely situation-specific, and will form part of the *unlikely* war. Also, in today's interconnected world, with different networks interacting in physical, social, business, and media-based domains, true economic information warfare as elucidated by Libicki may not be possible. In addition, an information blockade is likely to have a greater unacceptable collateral damage.

Lastly, Libicki's seventh form of information warfare, which is a broad category that includes information terrorism, semantic attacks, simula warfare and Gibson warfare, is *clearly the least tractable*. Information terrorism and semantic attacks may be defined as part of *arguable* war since exploitation of specific information systems that are used by terrorists can be targeted after intensive data mining efforts and the corruption of their websites and the data therein is possible, but its impact and benefits cannot be clearly visualized. Simula and Gibson warfare fall into the category of *Unlikely* with respect to the GWOT.

Forms of Warfare	Libicki's - State Centric View / Conventional Scenario	Global War on Terror – Non-State View / Irregular Scenario
Real	C2W IBW EW PSYOP against commanders and forces.	C2W (only Anti-Head) IBW (only Offensive IBW) EW (only Anti-communication) PSYOP against national will and cultural conflict Hacker warfare (surgical offensive operations) Hacker warfare (dedicated defensive operations)
Arguable	PSYOP against national will and culture Techno-imperialism.	C2W (Anti-Neck) EW (Cryptography) PSYOP against commanders and troops Information terrorism Semantic attacks
Potential	Hacker warfare Information blockade Information terrorism Semantic attacks.	
Unlikely	Simula warfare Gibson warfare.	EW (Anti-Radar) Information blockade Information imperialism Simula warfare Gibson warfare

Table 9. Global War on Terrorism and Libicki's '*Mosaic of Forms*' – A Counter-Terrorism Perspective.

Libicki also defined the capabilities and vulnerabilities of the United States against *a prototypical sophisticated foe of the future: a middle income country with access to global markets for electronic equipment and engineering talent* that is *Powerful*, *Powerful but Vulnerable*, and *Vulnerable* for each of the elements.³⁷⁶ In the case of C2W, its efficacy against a networked terrorist organization appears diminished. Terrorist organizations are inherently more invisible and undertake explicit actions to *hide* from the efforts of intelligence agencies by relying on non-technical methods. Although, Simula Warfare and Gibson warfare may be categorized as *Powerful*, they could more explicitly be put in a new category of *Powerful but Unexplored*. The summary of the capabilities and vulnerabilities in the case of the GWOT are highlighted in the following table.

Capabilities or Vulnerabilities	Libicki's Mosaic of Forms in the Context of GWOT
Powerful	IBW Economic Information Warfare Cyber Warfare (Simula Warfare and Gibson Warfare)
Powerful but Vulnerable	C2W Hacker Warfare Cyber Warfare (Information Terrorism and Semantic Warfare)
Vulnerable	PSYOP

Table 10. Libicki's Capabilities/Vulnerabilities in the Context of GWOT.

³⁷⁶ Martin Libicki, "What is Information Warfare?"

2. Applicability of Information Operations in the Timeline of Afghanistan and Iraq Wars

There are a number of elements not included by Libicki as part of his seminal paper that form part of the information operations doctrine of the United States like deception and the *supporting* and *related* capabilities of information operations. These additional elements find their use in the operations conducted against terrorists and their networked organizations. Analyzing their impact and potential over the timeline of conflict for both Afghanistan and Iraq enables us to determine what form has a greater potential in which phase of operations. Again, the idea behind this analysis is that it will provide clarity and focus to the polity and military commanders, as well as the soldiers, enabling them to concentrate their efforts during the different phases of operations so as to favorably exploit and modulate the information environment.

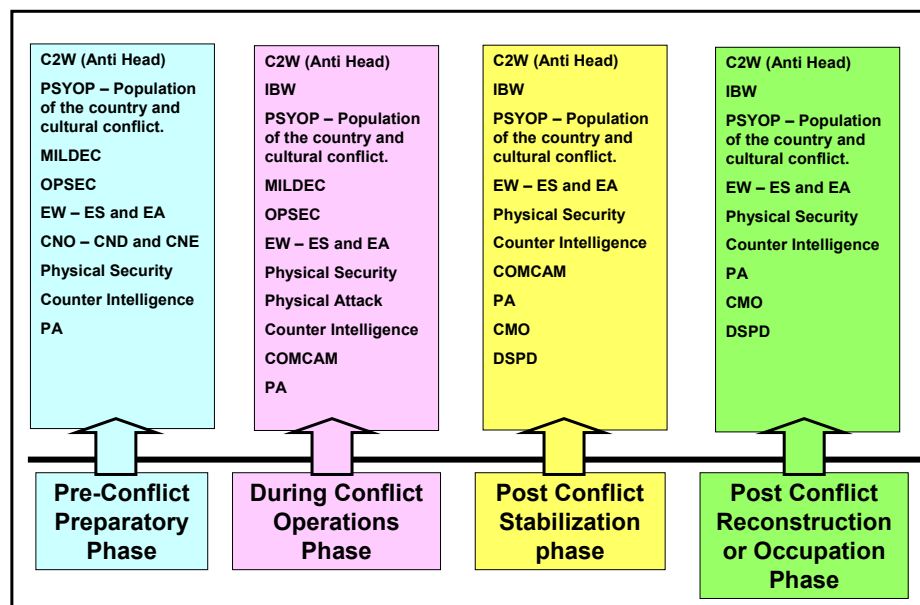


Figure 18. Applicability of Information Operations in the Timeline of Afghanistan and Iraq Wars.

In these types of conflicts, where the GWOT involves attacking a state that is sponsoring or abetting terrorism, and thereafter providing stability to that state to prevent the resurgence of terrorists, we see that C2W (Anti-Head), PSYOP – targeting population and cultural conflict, EW – ES and EA, Physical Security, Counter Intelligence and PA, are the common elements during all phases of operations. Therefore,, these are the forms of information operations on which militaries need to focus during force application requirements and in the training of troops who are going to be involved in such wars. The context in this type of war is as important as the conduct of war and there needs to be a greater focus on integrating the various components of information warfare so that each one provides a complementing effort to the overall *infosphere*.

B. A STRATEGY FOR INFORMATION OPERATIONS IN PURSUIT OF TERRORISTS

...Terrorism exploits the technologies spawned by globalization, recruits its foot soldiers on ideologies of bigotry and hatred, and directly targets democracies. And yet, it is a sad reality that international networks of terror appear to cooperate more effectively among themselves than the democratic nations that they target. We speak about cooperation, but we often seem hesitant to commit ourselves to a truly global offensive to root out terrorism with the pooling of resources, the exchanging of information, the sharing of intelligence and the unambiguous unity of purpose that is required. That must change. We do have a global coalition against terrorism; we must now give it substance and credibility, avoiding selective approaches and political expediency..³⁷⁷

— Prime Minister Manmohan Singh, India

After September the 11th, I made a commitment to the American people that the United States of America will not wait to be attacked again. We will take the fight to the enemy, and we will defend our freedom..... To win this war on terror, we will use all elements of national power. We will use our military.....We'll use our diplomatic corps. In other words, we're working with friends and

³⁷⁷ Prime Minister Manmohan Singh, India. UN General Assembly, New York, Sep 23, 2004 [on-line], available from [http://disarmament.un.org/library.nsf/ee2e1d19ed299db885256e400059830b/4363f3c8fa13437c85256f3b0059fb0b/\\$FILE/gapv59.7.pdf](http://disarmament.un.org/library.nsf/ee2e1d19ed299db885256e400059830b/4363f3c8fa13437c85256f3b0059fb0b/$FILE/gapv59.7.pdf), accessed Aug 1, 2007.

*allies.....We're beefing up our intelligence here in America.....it's a different kind of war.*³⁷⁸

— President George W. Bush, USA

The Prime Minister of India and the President of the United States, in their above quotes, have elucidated their strategic directives to fight terrorism quite clearly. The acceptance of terrorism as a global phenomenon and the participation by many nations in the GWOT is a testimony to that fact. There is a need now to build around these efforts and to raise the GWOT to the next level with total commitment and unbiased ruthlessness *sans cesse*. These efforts must aim to translate the macro directives into perceptible tactical victories against terrorists round the globe so as to make a significant dent in today's networked Jihad. There is a need to adopt a “*multi-pronged, multi-dimensional, multi-agency, multi-jurisdictional, and multi-national model to combat terrorism and extremism.*”³⁷⁹ The ideological linkages to Al Qaeda aims and objectives are visible across the spectrum of regional Islamic terrorist organizations in addition to their local agenda. The global terrorism phenomenon is an Islamic fundamentalist ideological network that needs to be paralyzed by a more efficient anti-terrorism network established between a disparate comity of nations that is equally adaptive and innovative and in tune with today's Information Age.

The foundation of global Jihad that has been laid by Al Qaeda entails the corruption of moderately inclined local Islamic groups to take the form of belligerent fundamentalist organizations having deep-rooted local agendas with global Jihadi linkages. The exploitation of the Globalization Phenomena and the Information Age paradigms for the sustenance of the ideology and perpetration of violence is the theme. The ability of networked Jihadi movements in the Information Age to focus on adaptive organizations, doctrine, strategy, and technology, will remain the major catalyst for their evolution and sustenance.

³⁷⁸ President George W. Bush, “President Discusses Second Term Accomplishments and Priorities,” Gaylord Texan Resort Convention Center, Grapevine, Texas, Aug 3, 2005 [on-line], available from <http://www.whitehouse.gov/news/releases/2005/08/20050803.html>, accessed Aug 1, 2007.

³⁷⁹ Rohan Gunaratna, *The New Face of Al Qaeda: Understanding the Generational Gradient in Local and Global Jihad Campaigns*, POINTER, Vol.29 No.4, Oct-Dec 2003.

There is no simplistic prescription for countering, preventing or eradicating terrorism related to Islamic fundamentalism as also a part of the globe remain unaffected by this phenomenon. What is required is a balanced approach that involves short-term tangible and visible targets and long-term persistent efforts that, on the face of it, may not appear too relevant or may require a shift from the current myopic outlook, but will definitely reshape the international environment toward peace and prosperity.

The strategy for pursuing terrorists must flow from the identified or perceived vulnerabilities of the terrorists followed by defining the imperatives for the war on terror, and all this then be integrated into a information strategy.

1. Exploiting the Vulnerabilities of Islamist Terrorists through Information Operations

The following paragraphs highlight the vulnerabilities of Islamist terrorist organizations and elucidate the components of information operations that are likely to have the greatest effect on exploiting them.

a. Leadership

Most of the Islamist terrorist groups have a dynamic leadership with leaders becoming *cult figures* that are able to provide religious-based guidance for undertaking terrorist activities. As in any organization, the terrorist groups also have differences amongst the top leadership that need to be exploited. In the realm of operations against the leadership, an attack could be restricted only in the informational domain, with little physical resources dissipated for hunting it down. The capture of the top leadership may not be possible and hence an active informational campaign should be enough to restrict their active involvement and participation. In any case, the efficacy of leaders of Al Qaeda, like Osama bin Laden or Ayman Al Zawahiri, in actively controlling and coordinating the network of Al Qaeda is actually quite minimal. The physical resources could effectively be used in breaking the second, third and fourth tier leadership who are considered important nodes in the terror networks; such

objectives are considered achievable. The importance of Osama bin Laden and Ayman Al Zawahiri is lesser at the operational level, while their greater importance is at the strategic and symbolic levels. Hence, the targeting of Osama bin Laden and Ayman Al Zawahiri need to be pursued in the *infosphere* without diverting important physical resources for their man-hunt.

b. Increased Networking with Disparate Groups

Islamist terrorist organizations worldwide, and in particular Al Qaeda, have forged relationships with many organizations that are geographically and ideologically distant. There are two aspects of the enlarged network. Firstly, it signifies growth in the organizations, increased capabilities, and increased resources. Secondly, it merges organizations that have distinct ideologies and local obligations. The first aspect may be considered positive to the terrorist organizations, but the second aspect highlights increased dissension targets as well as the imbalance in nodes and links as potential targets, and allows an increase of focus on the local counter-terrorist security agencies.

c. Need for a Haven

Islamic terrorist organizations need a place of refuge in the Islamic world in order to establish or re-establish and plan and coordinate their activities. In the case of Al Qaeda, the progression from Somalia to Afghanistan and now Pakistan confirms this aspect. They may have their independent cells around the world, but they still need a base in some Islamic country or a community in a non-Islamic country. This mainly depends on the local support that is available in places of refuge as well as the inept attitude of the local government authority. The present places of refuge for Al Qaeda and the Taliban have been identified as the areas in Pakistan. Similar places that are vulnerable to the acceptance of Islamist terrorist organizations need to be identified, and a *pre-emptive* approach is in order to prevent the progression of Islamist terrorist organizations to those places.

d. Financial Network and Fundraising Activities

Islamist terrorist organizations depend on finances to undertake their activities. They obtain their money through various means including large donations by individuals, front business organizations, and fund raising in the Muslim world as well as throughout the expatriate community. The routing of money is done through *Hawala*-like transactions using criminal organizations, and through seemingly legitimate transfers within the global financial network. Financial assets are needed by the terrorist organizations for the purchase of weapons and other related equipment, planning a strike, payments to terrorists and their family members, etc. This entire chain has many possible chinks and can be exploited through information means by targeting high profile donors, the entire fund-raising process, and the distribution and transfer network especially those using legitimate financial institutions.

e. Channels of Communication and Coordination

The channels of communication that the Islamist terrorist organizations use are diverse: loudspeakers in mosques, the Internet, cell phone and landline telephone networks, audio and visual media networks, and of course, human courier service. Denying these channels of communication to the terrorists is a difficult proposition, but modulating it is achievable. The media outlets can be surgically *flooded* with content adverse to terrorist organizations, and there could be a greater interaction and engagement with Middle East media channels for modulating the media content. There is also a need to increase the intelligence and surveillance activity over the global communications network. The Internet is now the major carrier of Jihadi activities as well as command and control interactions. The over-dependence on the Internet may lead to it being a critical vulnerability, and for this reason, any technological capability to deny, partially deny, or selectively deny Internet availability, or to actively exploit it to gain intelligence and monitor terrorist communication, is likely to pay a handsome dividend.

f. Voice of Moderate Islamic Clerics and Religious Figures

Muslims cannot be defeated by others. We Muslims are not defeated by our enemies, but instead, we are defeated by our own selves.

— Abdullah Azzam

Islamist terrorists use religion to profess their ideology and gain sympathy and support from persons of similar religious backgrounds. Hence, if the Islamist terrorist leaders can modulate the pitch of their movement by resorting to religious misinterpretation, then in a similar way, the Islamic clerics and religious figures, with moderate interpretations of Islam, can just as easily influence the Muslim population in an exactly opposite manner. Efforts in this direction to create or promote moderate Islamic religious figures as powerful as Osama bin Laden, and other proponents of violent Islamic Jihad, may assist in keeping a check on the growing number of Muslims who accept the violent form of Jihad.

g. Finding New Jihadists

There are two categories of Islamist terrorists. The first category consists of the *foot-soldiers* who are indoctrinated due to their environment, society, and access to hard-line Islamic education. The other category consists of educated and professional Muslim youths who are disillusioned by the societies in which they live and who then move on to accept the violent form of Islam to highlight their grievances, then in due course, are manipulated to accept the greater *cause* of the Islamist terrorist group that they join. The global Jihad propagated by Al Qaeda can only be sustained if there is a steady flow of recruits who accept its ideology and pursue its goals. This flow of recruits can be seen as a vulnerability and there may be a number of avenues, both long term and short term, by which they can be tackled.

h. People Power and Internationalization

I object to violence because when it appears to do good, the good is only temporary; the evil it does is permanent.

— Mahatma Gandhi

The Islamist Jihadists are a tiny minority group amongst the Muslim population. The majority of the people in the Muslim world, as well as people from other religious backgrounds, do not support violence as a means to project their grievances. This is amply clear from various polls conducted by several different organizations. The following figure (Figure 19) depicts the results of polls conducted by Pew Global Attitudes Project in different regions of the world in 2005. The poll results clearly show that the majority of the people do not subscribe to the ideas of Osama bin Laden nor do they support the violent means used by today's Islamist terrorists. Similar polls conducted by World Public Opinion, Terror Free Tomorrow, and a host of other organizations, paint the same picture. There is a need to leverage such results and use them to underplay the presumed popularity of the Jihadi culture amongst the Muslim population.

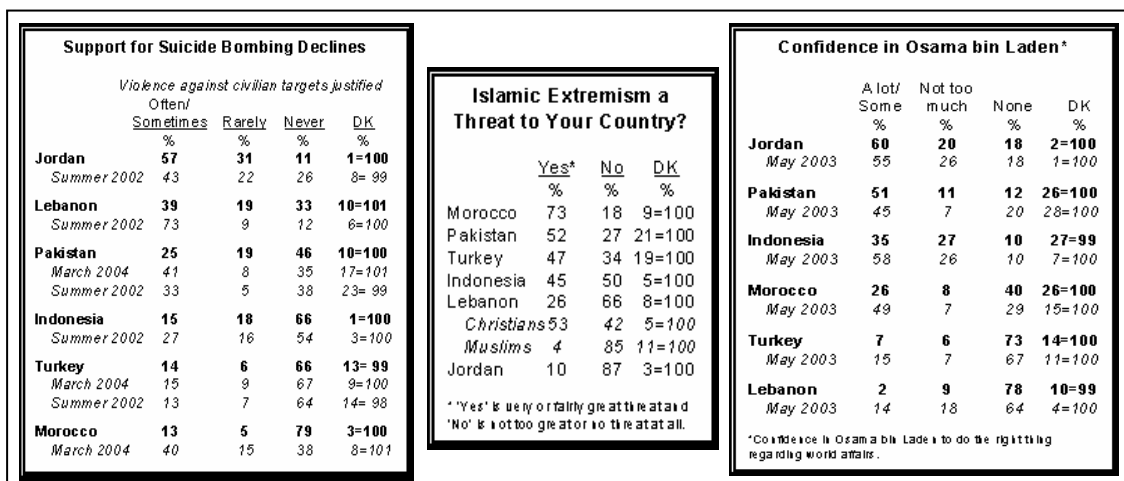


Figure 19. Pew Polls Conducted in 2005.³⁸⁰

³⁸⁰ Pew Global Attitude Project, "Islamic Extremism: Common Concern for Muslim and Western Publics," Jul 14, 2005 [on-line], available from <http://pewglobal.org/reports/display.php?ReportID=248>, accessed Jul 31, 2007.

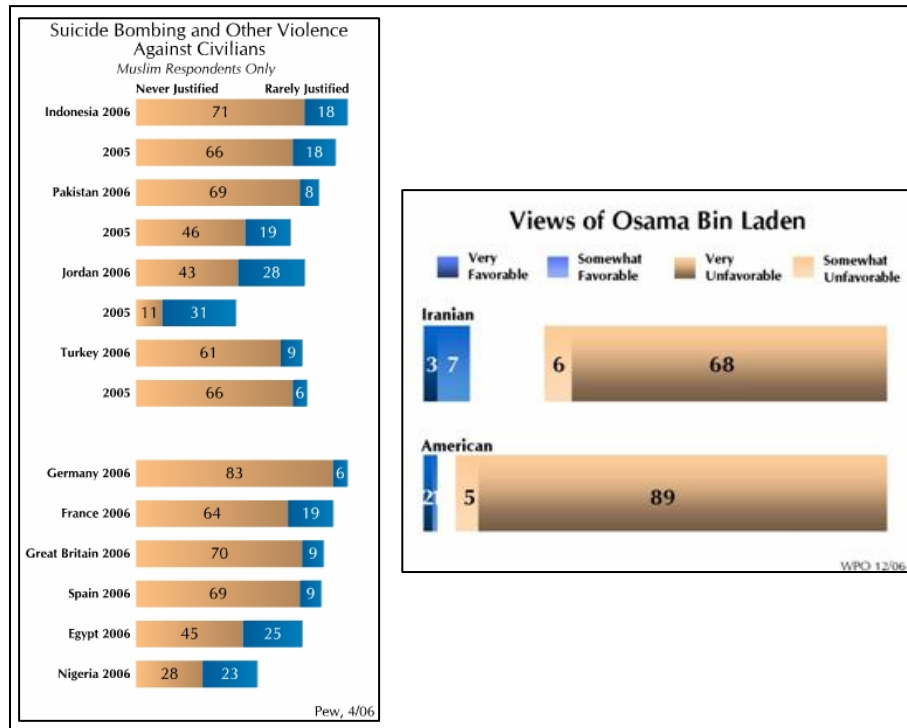


Figure 20. Pew Polls and World Public Opinion Poll Conducted in 2006.³⁸¹

The other related vulnerability is of internationalization, in terms of an increase in discussions on the subject amongst people of the world, and the such discussions leading to undermining the Islamist terrorist agenda that perpetrates violence against humanity. Internationalization also implies greater focus on the menace of terrorism, and greater cooperation and coordination. In order to exploit this vulnerability, it is necessary to consolidate the efforts of different countries and groups so as to define a coherent strategy.

³⁸¹ World Public Opinion Website, "Large and Growing Numbers of Muslims Reject Terrorism, Bin Laden," and "Iranians Overwhelmingly Reject Bin Laden," Jun 30, 2006 and Jan 30, 2007 [on-line], available from http://www.worldpublicopinion.org/pipa/articles/international_security_bt/221.php?nid=&id=&pnt=221, and <http://www.worldpublicopinion.org/pipa/articles/brmiddleeastnafricara/313.php?nid=&id=&pnt=313&lb=btis>, accessed Jul 31, 2007.

2. Imperatives of the War on Terror

The magnitude of the phenomenon of Islamic terrorism necessitates the acceptance of the imperatives mentioned below prior to defining the strategy.

- The Terror War is essentially a political and social war that requires military support.
- International cooperation and an international framework is a prerequisite.
- The campaign against terrorism will be protracted.
- The aim of moderating the Islamic fundamentalist ideology through the subtle use of Information Age paradigms and by exploiting the mechanisms of globalization is fundamental.
- A focus on the terrorists' support structures and sanctuaries is important, without distinction, along with a robust reconstitution and reconstruction policy.
- Networking in the larger space between countries, as well as internally between militaries, intelligence, and polity is essential.
- Organizational adaptability to exploit the power of network and information is essential.
- Military force will remain as the entry point to tackle a regional terrorist center, with reliance on small and agile but potent combat teams.
- Defensive measures against terrorist actions will never be fool-proof, but must have a deterrent and preventive value.

3. Strategic Level Guidance for Information Operations in Pursuit of Terrorists

The Islamist terrorism that is visible today is a complex web of local organizations that form part of a transnational network due mainly to the globalization of information. The causes of localized Islamist terrorist organizations have strong political and societal dimensions, but on the macro level, there is a definite need to focus on the root causes of terrorism to define a long-term policy. The following paragraphs highlight the macro level guidance necessary to give impetus to the current war on terror.³⁸²

³⁸² The vulnerabilities of Islamist terrorist organizations (covered earlier), although not explicitly addressed in the following paragraphs, but an integrated information operations strategy to exploit those would provide rich dividends.

a. Global War on Terror Necessitates Global Effort

Terrorism, in the form of an Islamic fundamentalist movement, is active around the globe; an incident in one part of the world has its links and effects in the other parts. The Islamist terrorist organizations have been able to successfully integrate their local goals with the larger goals as propagated by Al Qaeda. The United States and its coalition partners are fighting a GWOT, but increasingly it is perceived as a war of the United States. Many other countries need to be actively integrated into this battle. A war against terror requires a comprehensive, cooperative, and global approach. The United Nations' High Level Panel on Threats, Challenges and Change,³⁸³ that consisted of 16 eminent persons from around the world with a wide range of experience and expertise, has in its report suggested a *Comprehensive Strategy* that acknowledges the fact that "*the right to life is the most fundamental of human right.*"

The comprehensive strategy includes first dissuasion; by reversing the causes of terrorism through promoting social and political rights, encouraging the rule of law and democratic reform, reducing poverty and unemployment, and stopping state collapse. Secondly, efforts must be made to counter extremism and intolerance through education. Thirdly, develop better instruments for global counter-terrorism cooperation within a legal framework, including financial control, and resorting to denial and interdiction where necessary. Fourthly, build up state capacity to prevent terrorist recruitment and operations. Such a *Comprehensive Strategy* necessitates the formation of global alliances and a global coalition. A strategic undertaking by all peace-loving nations who respect human life and basic societal values is thus a mandatory step toward fighting and eradicating the menace of terrorism.

Constant pressure, in terms of policy and direction, from a world body like the UN, and its significant follow-up by all countries, either due to their global obligation or through coercive means, will then be perceived as acceptable. There is still a deficiency in the United Nations in terms of the

³⁸³ United Nations, *A More Secure World: Our Shared Responsibility*, Report of High Level Panel on Threats Challenges and Change, United Nations General Assembly, Dec 1, 2004 [online], available from <http://www.un.org/secureworld/>

achievement of a collective outlook and approach toward terrorism. World War I gave us the League of Nations, World War II the United Nations; the Cold War gave us NATO and the Warsaw Pact. Will the Global War on Terror lead to some other independent alliance for exclusive focus? As Victor Hugo said, “*Nothing in the world is so powerful as an idea whose time has come.*” The impact of the information environment on such an alliance, partnership, and cooperation will be immense.

b. From a Global War on Terror to Localized Wars on Terror on the Global Front

Even though an exclusive alliance to counter Islamist terrorism may not be achievable in the short term, or may not be sustainable over a longer period of time, there is a definitely a need to provide a *limiting value*, and some *boundary conditions* need to be imposed on the GWOT to make it more manageable. There may be a need to shift the outlook of GWOT from a global front against Islamist terrorism to *Localized Wars on Terror* that are geographically dispersed and involve different parties and militaries but under the same umbrella of the global alliance. The benefits would, firstly, entail, the availability of a greater number of resources, and secondly, engage the adversary in all regions and hence deny a localized base and the time necessary for Islamist terrorist organizations to re-build their infrastructure. The information campaign that has persuaded the government of Pakistan to undertake decisive actions against Islamic extremists that have successfully established a base in the Waziristan area is a case in point. This would enable collective and simultaneous action in dispersed geographical regions, currently reeling under the menace of terrorism, and also provide “substance and credibility” to the GWOT.

c. Re-shift the Focus on Al Qaeda and Affiliates

Each passing day, the United States-led war in Iraq is perceived more and more as an aberration with respect to the GWOT. The Muslim world is divided on its response to this occupation. They are worried about the intentions

of the United States with regard to the Middle East, and this has led to a more sympathetic response to the propaganda perpetrated by Islamist terrorists from the Muslim community, toward Islamist terrorism, as an avenue for war against the United States. The effort and resources to contain the insurgency in Iraq is eating into significant resources and policy imperatives that need to be focused more directly on Al Qaeda and its affiliates as adversaries in the GWOT. In order to focus on areas and regions wherein Al Qaeda and its affiliates are undertaking a proactive campaign to re-establish themselves, a re-assessment of the United States involvement in Iraq is seen as essential. The complete withdrawal of United States-led forces from Iraq may not be possible due to such a re-assessment, but certainly it would imply a drastic reduction of forces, establishment of small operating bases within Iraq to conduct surgical operations, and an integrated truly global force to provide relief and reconstruction assistance to Iraq. The impact of such a reduction may be motivating for Al Qaeda and its affiliates, but its impact in the information front on the large number of moderately inclined Muslim populations of the world would be immensely positive. Discussions going on at the United Nations toward increasing its involvement in Iraq are a step in the right direction. This approach will also enable a more focused view toward threats emanating from Al Qaeda, especially in Afghanistan and the Western regions of Pakistan. Similarly, it is necessary to increase cooperation in the information domain with countries that are being influenced either by Al Qaeda or through its affiliates. A common information perspective needs to be defined and proactive sharing of information is required.

d. *Divide and Conquer in the Infosphere – Countering the Ideology*

David Frum and Richard Perle in their bestselling book, *An End to Evil* remark, “*The war against extremist Islam is as much an ideological war as the Cold War ever was.... Terrorists, in other words, are motivated by ideology.*”

*Discredit the ideology and you defeat the terrorists.*³⁸⁴ The domain of information operations provides us with the necessary tools to formulate a cohesive ideological response that must include:

- Ways and means to prevent the dissemination of Al-Qaeda's message by obstructing its covert and overt channels of transmission (Libicki's information blockade).
- Legal curbs including punitive measures on Islamic radicals for their marginalization and for promoting the ideological tenets of traditional Islam by strengthening the bonds between Muslim communities and the State, and through interaction at the intellectual level between modern Muslim states and western societies.
- A global information campaign, based on truth, to highlight the fallacy of extremist Islam philosophy and expose the righteous virtues of Islam.
- The war against ideology needs to be a community effort and as the authors Frum and Perle suggest, "The future of extremist Islam will be decided by Muslims themselves, by reference to their own values and their own interests."

The campaign in the infosphere needs to be modulated to divide the Islamist terrorists from the audiences they seek and the influence they aim to have on *fence-sitters*, as well as the moderately inclined Muslim population. The focus of this policy must be to divide terrorists from the general population, to divide terrorists from their overt or covert sponsors, and to divide the terrorists internally. The strategy for countering ideology can easily be integrated by using divisive information operations aimed at segregating the Islamist terrorist groups through manipulation, modulation, denial, over-load of information, and through information deception operations.

³⁸⁴ David Frum and Richard Perle, *An End To Evil* (New York: Ballantine Books, 2004), 125 and 201.

e. *Intelligence and Information Sharing*

Intelligence is by far the single most important resource in the war against Islamist terrorism. The intelligence infrastructure has been built over the years with a *state-centric approach* based on the fact that each nation has another nation-state as its potential adversary. The present day's Islamist terrorism, that is prevalent in some form in every corner of the world, necessitates that the overall intelligence apparatus undergoes a transformation. The transformation should acknowledge the dynamic and constantly changing nature of terrorist organizations, and hence the intelligence organizations need to be equally adaptive and agile. The transformation should also be in terms of policies and regulations for sharing information with the agencies of other countries, and vice versa. Technological superiority in intelligence gathering mechanisms may be a big advantage, but it is not a condition sufficient to achieve the required *actionable* intelligence. Links with human intelligence operators across regions and open channels of communications need to be integrated with technical capability. The security in the global information age will not be achieved by only building strong defenses, but also by building an inter/intra agency counter-terror network for the sharing of information and intelligence.³⁸⁵

f. *Influence Campaigns Against Islamist Terrorists*

The information age, its related technologies and the networked channels of communications, have changed understanding and perspective toward the levels of warfare. The distinction between a tactical and a strategic event is fast eroding; a seemingly docile tactical activity can catapult itself to an event with strategic repercussions in no time, and without any intrinsic effort. The influence campaigns planned through the components of information operations need to factor this changed scenario while facilitating the influence campaign against Islamist terrorists. Further, the channels for information dissemination

³⁸⁵ John Arquilla and David Ronfeldt, *Networks and Netwars: The Future of Terror, Crime and Militancy* (Santa Monica: RAND Corporation, 2001) [on-line], available from http://www.rand.org/pubs/monograph_reports/MR1382/index.html, accessed Aug 3, 2007.

have also become enlarged, which leads to two inferences. Firstly, there will always be some confusion in trying to determine correct information from the vast majority of inaccurate information, and secondly, the channel or medium of transmission becomes an important factor when validating the authenticity of the information. The first inference must be used to counter the propaganda of the Islamist terrorists, and the second inference must be used for conducting our own influence campaign. The influence campaign needs to integrate all the aspects of PSYOP, PA, Counter-Intelligence, OPSEC and deception to fight the “*war of words*” and the “*battle of hearts and minds*.” The themes for the influence campaign must aim at decreasing the appeal and legitimacy of the ideology of Islamist terrorists, differentiate terrorism and Islam, support the legitimacy of elected representatives, uphold and publicize the views of moderate Islamic political and religious leaders, and launch a campaign to address the grievances raised by Muslim populations against the United States. The impact of these operations is only sustainable if there are commensurate visible impacts in the physical domain.

g. Severing the Networked Terrorist Linkages

The networked structure of Islamist terrorist organizations essentially points us in the direction of building our own networks to fight the global terrorism menace. There is a need to focus on the Islamist terrorist network in the broader sense and to break up its linkages with continued offensive actions. These networked actions may not always involve the military force as the facilitator, but may go beyond, and include: diplomatic coercion to influence a state to prevent its geographical boundary being used as a sanctuary and training ground for the terrorist, obstructing the flow of funds and weapons to the terrorist through stricter (but focused) financial and trade regulations, isolation of the terrorist organization both geographically and socially, and by an invisible management of media and the Internet to limit its communication and

propaganda activity. This will ensure a split in the terrorist network resulting in loss of their power and accessibility and denying them time, space, and resources.

h. Military Transformation – Towards an Irregular Approach

The military dimension to the Terror War will involve defensive, offensive, and punitive operations. Although the military dimension will be overshadowed by political and diplomatic overtures, without the military component this war cannot be won.³⁸⁶

The battlegrounds in Afghanistan and Iraq have pushed the military into an unconventional, irregular form of warfare that requires modifications to existing doctrine, principles, organization, and support measures. The force needs to be networked, adaptable, and innovative. These necessitate the use of Special Forces' teams that are technologically superior, and organizationally small, but potent. The application of massed military forces may or may not be required initially to gain an entry point, destroy sanctuaries and bases, and localize the terrorist, but military operations must consider the enduring nature of such conflicts and the social, political, military, and geographic context in which the force is to be applied. Information operations at the macro level could be applied consistently over a period of time to prevent application of a large military force to fight the war on terror. The application of force must reflect the particular character of the social system being engaged. The duration of the conflict will require mass-military force to deal, on a greater level, with "winning the hearts and minds" and for providing a deterrence value and mass-impact, as was done in Iraq with specialized offensive actions against the terrorist left for the small Special Forces' teams³⁸⁷. The integration of

³⁸⁶ Barry R. Posen, "The Struggle against Terrorism: Grand Strategy, Strategy and Tactics," *International Security*, Vol. 26, No 3, Winter 2001/2002, 39-55.

³⁸⁷ The conventional elements have had a hard time in relating to the whole notion of the "hearts and minds" campaign. Although, a drastic reorganization in military forces is not foreseeable in the near future but there is need to validate the efficacy of small well organized, and appropriately resourced troops to undertake the "hearts and minds" campaign at a much larger scale.

organizations other than military, to work and deploy with the specific aim of social and cultural reconstruction that will cause the isolation of terrorists from their support structure, is considered absolutely essential. Further, relying on specialized information operations units is necessary, but there needs to be a greater focus on using all soldiers as information warriors in their immediate tactical vicinity.

C. CONCLUSION

The campaign to suppress international terrorism seems foreordained to be a long one, with periods of optimism dispelled by new attacks and ensuing despair. Defeating international terrorism will require intense and sustained political attention, not the least of which would be to build adaptable and innovative networks across a number of agencies to coordinate internally and collaborate internationally. We must aspire to build a global counter-terrorist network that is more comprehensive, more intense, and more adaptable than anything the terrorists can build.

The Islamist terrorists worldwide and Al Qaeda in particular, have adapted to the nuances of the Information Age and are exploiting information age technologies to fight a war against vastly superior forces. The present Information Age has greatly removed the barriers to waging and sustaining a successful campaign between two diverse adversaries. Information Operations and its various components provide us with an opportunity to formulate a cohesive and comprehensive strategy that can limit physical involvement to a minimum, and also prevent unnecessary collateral damage in the physical domain.

LIST OF REFERENCES

- 15(UK) Psychological Group Website. On-line. Available from http://www.army.mod.uk/15psyops/_afghanistan.htm.
- ABC Online. "How Al Qaeda Uses the Internet." Mar 19, 2004. On-line. Available from <http://www.abc.net.au/news/newsitems/s1069629.htm>.
- Ackerman, Robert K. "Iraq Hones Army Electronic Warfare." *Signal: AFCEA's International Journal*, Jun 2007. On-line. Available from http://www.afcea.org/signal/articles/templates/Signal_Article_Template.asp?articleid=1328&zoneid=209.
- Al Qaeda Manual. "Declaration of Jihad Against the Tyrants." On-line. Available from <http://www.disastercenter.com/terror/>.
- Armistead, Leigh, Ed. *Information Operations: Warfare and the Hard Reality of Soft Power*. Washington D.C.: Brassey's, 2004.
- Arquilla, John and David Ronfeldt. *Networks and Netwars: The Future of Terror, Crime and Militancy* (Santa Monica: RAND Corporation, 2001). On-line. Available from http://www.rand.org/pubs/monograph_reports/MR1382/index.html.
- Arquilla, John, David Ronfeldt and Michele Zanini. "Information-Age Terrorism." *Current History*, Apr 2000.
- Arquilla, John, David Ronfeldt and Michele Zanini. "Networks, Netwar, and Information-Age Terrorism." in Ian O. Lesse et al. (eds.), *Countering the New Terrorism* (Santa Monica, CA: RAND Corporation, 1999).
- Arquilla, John. "The Problem: War on Terror – How to Win." *Foreign Policy*, May/Jun 2007 Issue 160, 45.
- Arquilla, John. *The Reagan Imprint*. Chicago: Ivan R. Dee, 2006.
- Baker, Aryn. "Deadly Notes in the Night." *Time*, Jul 05, 2006. Online, Available from <http://www.time.com/time/magazine/article/0,9171,1209945,00.html>.
- Bakier, Abdul Hameed. "New Websites Incites Electronic Jihad." *Terrorism Focus*. The Jameston Foundation, Vol. III, Issue 38, Oct 3, 2006.
- Bakier, Abdul Hameed. "The 14th Issue of Sada al-Jihad Released." *Terrorism Focus*, The Jameston Foundation, Vol. IV, Issue 10, Apr 17, 2007.

- Bakier, Abdul Hameed. "The Evolution of Jihadi Electronic Counter-Measures." *Terrorism Monitor*. The Jamestown Foundation, Vol. IV, Issue 17, Sep 8, 2006. On-line. Available from http://jamestown.org/terrorism/news/uploads/TM_004_017.pdf.
- Bakier, Abdul Hameed. "The New Issue of Technical Mujahid, a Training Manual for Jihadis." *Terrorism Monitor*. The Jamestown Foundation, Vol. V, Issue 6, Mar 29, 2007.
- Banchik, Mira. "The International Criminal Court & Terrorism." Jun 2003. On-line. Available from <http://www.peacestudiesjournal.org.uk/docs/ICC%20and%20Terrorism.PDF>.
- Baran, Zeyno. "Fighting the War of Ideas." *Foreign Affairs*, Vol. 84, No. 6, Nov / Dec 2005.
- Bayles, Martha. "Public Diplomacy, TV-Style." *Wall Street Journal*, Feb 16, 2007. On-line. Available from <http://online.wsj.com/article/SB117160004807410941.html>.
- BBC News Website. "Afghan Hostage Deal is Condemned." Mar 22, 2007. On-line. Available from http://news.bbc.co.uk/2/hi/south_asia/6478793.stm.
- BBC Online. "Iraq war Illegal, says Annan." Sep 16, 2004. On-line. Available from http://news.bbc.co.uk/2/hi/middle_east/3661134.stm.
- BBC Online. "Britain and America have yet to Prove the Case Against Saddam, Suggests BBC Poll." Feb 12, 2003. On-line. Available from http://www.bbc.co.uk/pressoffice/pressreleases/stories/2003/02_february/12/iraq_poll.shtml.
- BBC Online. "Cook's Resignation Speech." Mar 18, 2003. On-line. Available from http://news.bbc.co.uk/2/hi/uk_news/politics/2859431.stm.
- BBC Online. "Radio Tikrit changes tune in Iraq." BBC News, Feb 23, 2003. On-line. Available from http://news.bbc.co.uk/2/hi/middle_east/2791865.stm.
- Benjamin, Daniel and Steven Simon. *The Next Attack: The Failure of the War on Terror and a Strategy for Getting it Right*. New York: Times Books, 2005.
- Bennetto, Jason and Ian Herbert. "London bombings: the Truth Emerges." *The Independent*, Aug 13, 2005. On-line. Available from <http://news.independent.co.uk/uk/crime/article305547.ece>.
- Biddle, Stephen. "Afghanistan and the Future of Warfare: Implications for Army and Defense Policy." Strategic Studies Institute, U.S. Army War College, Carlisle Barracks, Pennsylvania, Nov 2002.

- Biddle, Stephen. "War Aims and War Termination." In *Defeating Terrorism: Strategic Issue Analyses*. Colonel John R. Martin, ed. Strategic Studies Institute, U.S. Army War College, Jan 2002.
- Biden, Jr, Senator Joseph R. "Floor Statement: Earthquake Relief for Pakistan." Oct 25, 2005. On-line. Available from <http://biden.senate.gov/newsroom/details.cfm?id=249256>.
- Blair, Tony. Former Prime Minister of United Kingdom, speaking on the BBC's Iraq: Britain Decides program on Feb 12, 2003. On-line. Available from http://news.bbc.co.uk/2/hi/middle_east/2948068.stm.
- Blanchard, Christopher M. "Al Qaeda: Statements and Evolving Ideology." *CRS Report for Congress*, Nov 2004. On-line. Available from <http://www.fas.org/irp/crs/RS21973.pdf>.
- Blanchard, Christopher M. "Al Qaeda: Statements and Evolving Ideology." *CRS Report for Congress*, Report No. RL32759, Jun 20, 2005. On-line. Available from <http://www.fas.org/sgp/crs/terror/RL32759.pdf>.
- Borchgrave, Arnaud de. "Oozing Venom and Jihad." *Washington Times*, Aug 25, 2004. On-line. Available from <http://www.benadorassociates.com/article/6811>.
- Boyce, Walter J. *Operation Iraqi Freedom: What Went Right, What Went Wrong, and Why*. New York: Forge, Nov 2003.
- Briscoe, Charles H. et al., *Weapons of Choice: U.S. Army Special Operations Forces in Afghanistan*. Combat Studies Institute Press, Fort Leavenworth, Kansas, 2003.
- Bunker, Robert J. and Matt Begert. "Operational Combat Analysis of Al Qaeda Network." In *Networks, Terrorism and Global Insurgency*, ed Robert J. Bunker. New York: Routledge, 2005.
- Burke, Edmund. "Reflections on the Revolution in France." 1790. On-line. Available from http://www.constitution.org/eb/rev_fran.htm and also available from <http://www.bartleby.com/24/3/1001.html>.
- Burke, Jason. *Al Qaeda: Casting the Shadow of Terror*. New York: I.B. Tauris, 2003.
- Bush, George W. Jr., President of the United States of America. "The National Security Strategy of the United States of America." Mar. 16, 2006.

- Bush, George W. Jr., President of the United States of America. "President Bush Announces Major Combat Operations in Iraq Have Ended", May 01, 2003. On-line. Available from <http://www.whitehouse.gov/news/releases/2003/05/20030501-15.html>.
- Bush, George W. Jr., President of the United States of America. "President Outlines Iraqi Threat." Cincinnati, Ohio, Oct 7, 2002. On-line. Available from <http://www.whitehouse.gov/news/releases/2002/10/20021007-8.html>.
- Bush, George W. Jr., President of the United States of America. "President Discusses Second Term Accomplishments and Priorities." Gaylord Texan Resort Convention Center, Grapevine, Texas, Aug 3, 2005. On-line. Available from <http://www.whitehouse.gov/news/releases/2005/08/20050803.html>.
- Bush, George W. Jr.. President of the United States of America. "Address to the Joint Session of Congress." Sep 20, 2001. On-line. Transcript available from <http://www.globalsecurity.org/military/library/news/2001/09/mil-010920-usia01.htm>.
- Bush, George W. Jr., President of the United States of America. "President Speaks on War Effort to Citadel Cadets." Dec 11, 2001. On-line. Available from <http://www.whitehouse.gov/news/releases/2001/12/20011211-6.html>.
- Byman, Daniel. *Deadly Connections: States that Sponsor Terrorism*. New York: Cambridge University Press, 2005.
- Cammons, Dave and et. al. *Network Centric Warfare Case Study: U.S. V Corps and 3rd Infantry Division (Mechanized) during Operation Iraqi Freedom Combat Operations (March to April 2003) – Volume I: Operations*. United States Army War College, Carlisle Barracks, PA, 2006, 23.
- Carmack, Justin "PSYOP Begins Broadcast in Fallujah." *Desert Rifles*, Issue 15. Aug 15, 2003. On-line. Available from <http://www.carson.army.mil/Desert%20Rifles/Desert%20Rifles%2015August03.pdf>.
- Carothers, Thomas. "Democracy: Terrorism's Uncertain Antidote." *Current History*, Dec 2003, 403-406.
- Carr, Caleb. *The Lessons of Terror: A History of Warfare Against Civilians; Why It Has Always Failed and Why It Will Fail Again*. New York: Random House, 2002.
- CBS News. "Taliban Won't Turn Over Bin Laden." Sep 21, 2001. On-line. Available from <http://www.cbsnews.com/stories/2001/09/11/world/main310852.shtml>.

- Center for American Progress Website. "Terrorism Index – 2007." *Center for American Progress*, Feb. 2007. On-line. Available from http://www.americanprogress.org/issues/2007/02/terrorism_index.html.
- Chambers, James. *The Devil's Horsemen: The Mongol Invasion of Europe*. New York, Atheneum, 1985.
- Chellaney, Brahma. "Fighting Terrorism in Southern Asia." *International Security*, vol. 26, No. 3, winter 2001/02, 94-116.
- Cloughley, Brian. "The Pentagon's Bungled PSYOPS Strategy: Iraq Isn't the Wild West, It's the Wild Middle East: the Cultures are Wildly Different." *CounterPunch Online*, Sep 3, 2003. On-line. Available from <http://www.counterpunch.org/cloughley09032003.html>.
- CNN Online. "Fierce Cyber War Predicted: Strides in Technology Magnify Info War Potential." Mar 3, 2003. On-line. Available from <http://www.cnn.com/2003/TECH/ptech/03/03/sprj.irq.info.war.ap/index.html>.
- CNN Online. "U.S.-funded Iraqi network challenges Arab stations." Nov 28, 2003. On-line. Available from <http://www.cnn.com/2003/WORLD/meast/11/28/tv.war.ap/>.
- Cooper, H.H.A. "Terrorism: The Problem of the Problem Definition." *Chitty's Law Journal*. 1978. 105-108.
- Cordesman, Anthony H. "The Post Conflict Lessons of Iraq and Afghanistan." Testimony to the Senate Foreign Relations Committee, May 19, 2004. On-line. Available from <http://www.senate.gov/~foreign/testimony/2004/CordesmanTestimony040519.pdf>.
- Cordesman, Anthony H. *The Iraq War: Strategy, Tactics and Lessons Learned* (Westport, CT: Praeger, 2003).
- Cordesman, Anthony H. *The Lessons of Afghanistan: War Fighting, Intelligence and Force Transformation*. Significant Issues Series, Vol. 24, Number 4, Center for Strategic and International Studies, Washington D.C., 2002.
- Cox, Joseph L. "Information Operations in Operation Enduring Freedom and Iraqi Freedom – What Went Wrong?" School of Advanced Military Studies, United States Army and General Staff College, Fort Leavenworth, Kansas, 2005-06. On-line. Available from <http://www.fas.org/irp/eprint/cox.pdf>.
- Crane, Conrad C. and W. Andrew Terrill. *Reconstructing Iraq: Insights, Challenges, and Missions for Military Forces in a Post-Conflict Scenario*, Strategic Studies Institute, United States Army War College, Feb 2003.

- Crenshaw, Martha ed. *Terrorism, Legitimacy and Power*. Middletown, Connecticut: Wesleyan University Press, 1983.
- Cullison, Alan and Andrew Higgins. "Files Found: A Computer in Kabul Yields a Chilling Array of Al Qaeda Memos --- Talk of 'Hitting Americans' and Making Nerve Gas; Spats Over Salaries, Rent --- A Guide to the 'Company'." *Wall Street Journal*, Dec 31, 2001.
- Current History Website. "Global Progress Report 2006." *Current History*. Dec 2005. Journal on-line. Available from at <http://www.currenthistory.com/GlobalProgressReport,2006.pdf>.
- Dagher, Sam. "US draws new Iraq-Al Qaeda Link: The US military says it caught the man who ties Osama bin Laden's network to Iraq." *The Christian Science Monitor*, July 19, 2007. On-line. Available from <http://www.csmonitor.com/2007/0719/p01s05-wome.html>.
- Davenport, Thomas H. Laurence Prusak and H. James Wilson. "What's the Big Idea?" Harvard Business School Press, Boston, Massachusetts, 2003.
- Deane, Claudia and Darryl Fears. "Negative Perception of Islam Increasing." *Washington Post*, Mar 9, 2006, A01. On-line. Available from <http://www.washingtonpost.com/wp-dyn/content/article/2006/03/08/AR2006030802221.html>.
- Delio, Michelle. "U.S. Tries E-Mail to Charm Iraqis." WIRED Online, Feb 13, 2003. On-line. Available from <http://www.wired.com/politics/law/news/2003/02/57648?currentPage=2>.
- DeLong, Lieutenant General Michael and Noah Lukeman. *Inside CENTCOM: The Unvarnished Truth about the Wars in Afghanistan and Iraq*. Washington D.C.: Regnery Publishing Inc, 2004.
- Denning, Dorothy E. "Is Cyber Terror Coming?" George C. Marshall Institute, May 2, 2002. On-line. Available from <http://www.marshall.org/pdf/materials/58.pdf>.
- Denning, Dorothy. "Power Over the Information Front." Conference Paper, Global Flow of Information, Yale Information Society Project (2005). On-line. Available from <http://islandia.law.yale.edu/isp/GlobalFlow/paper/Denning.pdf>.
- Dershowitz, Alan M. *Why Terrorism Works: Understanding the Threat, Responding to Challenge*. New Haven: Yale University Press, 2002.
- Dobbins, James. "Ending Afghanistan's Civil War." Testimony presented before the House Armed Services Committee on January 30, 2007.

- Earl, Robert S. and Norman E. Emery. "A Terrorist Approach to Information Operations." Masters Thesis. Naval Postgraduate School, 2003.
- Embassy of the United States in Baghdad Website. "Fact Sheet on Provincial Reconstruction Teams (PRTs)." Nov 14, 2006. On-line. Available from http://iraq.usembassy.gov/iraq/20060223_prt_fact_sheet.html.
- Emery, Norman, Jason Werchan and Donald G. Mowles Jr. "Fighting Terrorism and Insurgency: Shaping the Information Environment." *Military Review*, Jan-Feb 2005.
- Ey, Carl S. "Army Initiates Electronic Warfare Capability." *Army.mil News*, Dec 07, 2006. On-line. Available from <http://www.army.mil/news/2006/12/07/889-army-initiates-electronic-warfare-capability/>.
- Fattah, Hassan M. "Al Qaeda's Increasingly Reliant on Media." *New York Times*, Sep 30, 2006. On-line. Available from <http://www.nytimes.com/2006/09/30/world/30jordan.html?ex=1317268800&en=fb3721e1c7902aae&ei=5088&partner=rssnyt&emc=rss>.
- Finn, Peter. "Bin Laden Used Ruse to Flee: Moroccans Say Guard Took Phone at Tora Bora." *Washington Post*, Jan 21, 2003. On-line. Available from <http://www.washingtonpost.com/ac2/wp-dyn/A19238-2003Jan20?language=printer>.
- Fontenot, Gregory and et al. *On Point: The United States Army in Operation Iraqi Freedom*, (Fort Leavenworth, Kansas: Combat Studies Institute Press, 2004).
- Foreign Policy Website. "Terrorism Index – 2006." *Foreign Policy*, Jul. / Aug. 2006. On-line. Available from http://www.foreignpolicy.com/issue_julyaug_2006/TI-index/index.html.
- Franks, Tommy. "Statement to the Senate Armed Forces Committee," Jul 09, 2003.
- Fraser, Christian. "Prodi Attacked on Afghan 'deals'." BBC News, Apr 10, 2007. On-line. Available from <http://news.bbc.co.uk/2/hi/europe/6541137.stm>.
- Freeman Jr., Colonel Thomas. "Winning the War of Ideas in the Global War on Terrorism." *United States Army War College – Strategic Research Project*. Carlisle Barracks, Pennsylvania, May 03, 2004.
- Frum, David and Richard Perle. *An End To Evil* (New York: Ballantine Books, 2004).

- Frum, David and Richard Perle. *An End to Evil*. New York: Ballantine Books, Oct . 2004.
- Garamone, Jim. "Rumsfeld Lists Operation Iraqi Freedom Aims, Objectives," *American Forces Press Service*. On-line. Available from <http://www.defenselink.mil/news/newsarticle.aspx?id=29253>.
- Gellman, Barton. "Cyber-Attacks by Al Qaeda Feared." *Washington Post*, Jun 26, 2002.
- Gerth, Jeff and Scott Shane. "U.S. Is Said to Pay to Plant Articles in Iraqi Newspapers." *New York Times*, Dec 1, 2005. On-line. Available from <http://www.nytimes.com/2005/12/01/politics/01propaganda.html?ex=1291093200&en=15a816ad2c204281&ei=5088&partner=rssnyt&emc=rss>.
- Gibbs, Nancy. "What We've Learned." *Time*, 11 Sep 2006.
- GlobalSecurity.org Website. "Operation Iraqi Freedom: Lessons Learnt – 1st Marine Division." On-line. Available from http://www.globalsecurity.org/military/library/report/2003/1mardiv_oif_lessons_learned.doc.
- Golder, Ben and George Williams. "What is Terrorism? Problem of Legal Definition." *UNSW Law Journal*. Vol. 27/2, 2204, 270-272.
- Gotchev, Atnas. "Terrorism and Globalization." In *The Roots of Terrorism*, ed. Louise Richardson. New York: Routledge, 2006.
- Gulf Region Division Website - <http://www.grd.usace.army.mil/>.
- Gunaratna, Rohan, ed. *The Changing Face of Terrorism*. Singapore: Marshall Cavendish, 2005.
- Gunaratna, Rohan. "The New Face of Al Qaeda: Understanding the Generational Gradient in Local and Global Jihad Campaigns." International Center for Political Violence and Terrorism Research, Nanyang Technological University, Singapore. On-line. Available from <http://www.pvtr.org/pdf/Multi-generational.pdf>.
- Gunaratna, Rohan. "The New Face of Al Qaeda: Understanding the Generational Gradient in Local and Global Jihad Campaigns." *POINTER*, Vol.29 No.4, Oct-Dec 2003.
- Gurr, Ted. *Why Men Rebel*. Princeton, NJ: Princeton University Press, 1970.
- Haqqani, Husain. "Islam's Medieval Outposts." *Foreign Policy*. No. 133, Nov./Dec. 2002.

- Hassan, Muhammad Haniff Bin. "Key Considerations in Counter-Ideological Work Against Terrorist Ideology." *Studies in Conflict and Terrorism*, Vol. 29, 2006, 531-558.
- Hayden, Michael V. Director, Central Intelligence Agency. "The Current Situation in Iraq and Afghanistan." Statement for the Record Senate Armed Services Committee, Nov 15, 2006. On-line., Available from <http://armed-services.senate.gov/statemnt/2006/November/Hayden%2010-15-06.pdf>.
- Hayden, Michael V. Director, Central Intelligence Agency. "The Current Situation in Iraq and Afghanistan." Statement for the Record Senate Armed Services Committee, Nov 15, 2006.
- Hersh, Seymour M. "Torture at Abu Ghraib." *The New Yorker*, May 10, 2004. [On-line], Available from http://www.newyorker.com/archive/2004/05/10/040510fa_fact.
- Hess, Pamela. "Analysis: U.S War of Ideas." United Press International, Jan. 7, 2007. On-line. Available from <http://www.upi.com/SecurityTerrorism/view.php?StoryID=20070104-061232-1070r>
- Hoffman, Bruce. "Insurgency and Counterinsurgency in Iraq," *Studies in Conflict and Terrorism*, 29; 103-121, 2006.
- Hoffman, Bruce. *Inside Terrorism*. Revised and expanded ed. New York: Columbia University Press, 2006.
- Hoffman, Bruce. RAND Corporation. Testimony before the Committee on Armed Services, Subcommittee on Terrorism, Unconventional Threats and Capabilities, United States House of Representatives. 16 Feb 2006.
- Hosmer, Stephen T. *Why the Iraqi Resistance to the Coalition Invasion was so Weak* (Santa Monica: RAND Corporation, 2007).
- Huntington, Samuel. "Clash of Civilizations." *Foreign Affairs*, 72(3), Summer 1993.
- Huntington, Samuel. *The Clash of Civilizations and the Remaking of World Order*. New York: Simon and Schuster, 1996.
- International Security Assistance Force Website. On-line. Available from <http://www.nato.int/isaf/>.
- Jenkins, Brian Michael. "Can the Iraq Beast Be Tamed?" *Boston Globe*, May 18, 2005.

- Jenkins, Brian Michael. Remarks before the *National Commission on Terrorist Attacks upon the United States*, Mar 2003.
- Jenkins, Brian Michael. *Unconquerable Nation: Knowing Our Enemy Strengthening Ourselves*. Santa Monica: RAND, 2006. On-line. Available from <http://www.rand.org/pubs/monographs/MG454/>.
- Jones, Charles I. "Growth and Ideas." Working Paper 10767, National Bureau of Economic Research, Inc., Cambridge, Massachusetts, Sep. 2004. On-line. Available from <http://www.nber.org/papers/w10767>.
- Jones, General James L. USMC, Supreme Allied Commander Europe. Statement before the Senate Foreign Relations Committee, Sep 21, 2006. On-line. Available from <http://www.senate.gov/~foreign/testimony/2006/JonesTestimony060921.pdf>.
- Juergensmeyer, Mark. "Religion as a Cause of Terrorism." In Louise Richardson, ed. *The Roots of Terrorism*. (New York: Routledge, 2006).
- Kakkar, Kawun "An Introduction of the Taliban." *Institute of Afghan Studies*. Fall 2000. On-line. Available from http://www.institute-for-afghan-studies.org/AFGHAN%20CONFLICT/TALIBAN/intro_kakar.htm.
- Kautilya. *Arthashastra*. Translated by Project South Asia, Missouri Southern State University. On-line. Available from <http://www.mssu.edu/projectsouthasia/history/primarydocs/Arthashastra/index.htm>.
- Keller, Polli "Condi Rice Stands up First PRT in Iraq." *Army New Service*. Nov 14, 2005. On-line. Available from <http://www.globalsecurity.org/military/library/news/2005/11/mil-051114-arnews01.htm>.
- Kessler, Glenn and Colum Lynch. "France Vows to Block Resolution on Iraq War: U.S. Schedule Put at Risk By U.N. Debate." *Washington Post*. Jan 21, 2003.
- Kimmage, Daniel and Kathleen Ridolfo. "Iraqi Insurgent Media: The War of Images and Ideas." RadioFreeEurope/RadioLiberty Website, Jun 2007. On-line. Available from <http://realaudio.rferl.org/online/OLPDFfiles/insurgent.pdf>.
- Knights, Michael Andrew. *Cradle of Conflict: Iraq and the Birth of Modern U.S. Military Power* (Annapolis: Naval Institute Press, 2005).
- Kuchment, Anna et al. "School by the Book." *Newsweek*, March 11, 2002.

- Kurth, James. "Ignoring History: U.S. Democratization in the Muslim World." *Foreign Policy Research Institute*, Spring 2005. On-line. Available from <http://www.fpri.org/orbis/4902/kurth.ignoringhistoryusmuslim.pdf>.
- Kydd, Andrew H. and Barbara F. Walter. "The Strategies of Terrorism." *International Security*, Vol. 31, No. 1, Summer 2006: 49-80.
- Lamb, Christopher J. *Review of the Psychological Operations Lessons Learned from Recent Operational Experiences* (Washington D.C.: National Defense University Press, 2005).
- Lambeth, Benjamin S. *Air Power Against Terror: America's Conduct of Operation Enduring Freedom*. RAND Corporation. 2005.
- Langewiesche, William "Letter from Baghdad." *The Atlantic Monthly*, Jan / Feb 2005. On-line. Available from <http://www.theatlantic.com/doc/prem/200501/langewiesche>.
- Lawlor, Maryann. "Signal Intelligence System Uncovers Enemy Sites." *Signal Magazine*. Oct 2002. On-line. Available from http://www.afcea.org/signal/articles/templates/SIGNAL_Article_Template.asp?articleid=324&zoneid=31.
- Lazarus, David. "From a War on Terror to a War of Ideas." *Australian Army Journal*, Vol. III, No. 1, Summer 2005-06. On-line. Available from http://www.defence.gov.au/army/lwsc/Publications/journal/AAJ_Summer_05_06/lazarus_ideas_AAJ_Summer_05_06.pdf.
- Leppard, David. "Blair to launch spin battalion against Al-Qaeda propaganda." *Times Online*, Jan 28, 2007. On-line. Available from <http://www.timesonline.co.uk/tol/news/uk/article1267472.ece>.
- Lia, Brynjar and Katja H- W Skjolberg. "Causes of Terrorism: An Expanded and Updated Review of the Literature." FFI Research Report No. 04307. Kjeller, Norway: FFI, 2004.
- Lia, Brynjar and Katja H- W Skjolberg. "Why Terrorism Occurs: A Survey of Theories and Hypotheses on the Causes of Terrorism." FFI Research Report No. 02769. Kjeller, Norway: FFI, 2000.
- Libicki, Martin. "What is Information Warfare." *National Defense University*. 1995.
- Martin, Gus. *Understanding Terrorism – Challenges, Perspectives and Issues*. New York: Sage, 2003.
- Mazur, Allan. "Bombs Threats and Mass Media: Evidence for a Theory of Suggestion." *American Sociological Review*, Vol. 47, 1982, 407-410.

- Mazzetti, Mark and Borzou Daragahi. "U.S. Military Covertly Pays to Run Stories in Iraqi Press." *Los Angeles Times*, Nov 30, 2005.
- McDaniel, Erin A. and Julio A. Perez. "How to Visualize and Shape the Information Environment." *Field Artillery*. Nov-Dec 2006. On-line. Available from http://sill-www.army.mil/famag/2006/NOV_DEC_2006/NOV_DEC_06_PAGES_26_33.pdf.
- McNerney, Michael J. "Stabilization and Reconstruction in Afghanistan: Are PRTs a Model or a Muddle?" *Parameters*, Winter 2005-06, pp. 32-46. On-line. Available from <http://www.carlisle.army.mil/usawc/Parameters/05winter/mcnerney.htm>.
- Memorial Institute for the Prevention of Terrorism (MIPT) Terrorism Knowledge Base. On-line. Available from <http://www.tkb.org/AnalyticalTools.jsp>.
- MEMRI TV Monitor Project. "Excerpts of Statement by Ayman al-Zawahiri aired on Al Jazeera TV on Sep 19, 2005." On-line. Available from <http://www.memritv.org/Transcript.asp?P1=856>.
- MEMRI Website. Statement of Osama bin Laden., Dec 27, 2004. Published by MEMRI Special Dispatch Series – No. 837. On-line. Available from <http://memri.org/bin/articles.cgi?Page=archives&Area=sd&ID=SP83704>.
- MEMRI. "American Al-Qaeda Operative Adam Gadahn, Al-Qaeda Deputy Al-Zawahiri, and London Bomber Shehzad Tanweer in New Al-Sahab/Al-Qaeda Film Marking the First Anniversary of the 7/7 London Bombings." Special Dispatch Series No. 1201, Jul 11, 2006. On-line. Available from <http://memri.org/bin/articles.cgi?Page=archives&Area=sd&ID=SP120106>.
- MEMRI. Special Dispatch Series No. 1442, Jan 26, 2007. On-line. Available from <http://memri.org/bin/articles.cgi?Page=archives&Area=sd&ID=SP144207>.
- Middle Eastern Media Research Institute (MEMRI). "Al-Qaeda Operative Adam Gadahn, aka 'Azzam the American': 'The Truth of Islam is Sweeping Across America and Constitutes a Fearsome Challenge to the Security, Identity, and Survival of the Crusader State [America]'; Time is Running Out to Convert to Islam Before You Meet the Dismal Fate of Thousands Before You." Special Dispatch Series No. 1281, Sep 06, 2006. On-line. Available from <http://memri.org/bin/articles.cgi?Page=archives&Area=sd&ID=SP128106>.
- Milbank, Dana. "Bush Defends Assertions of Iraq-Al Qaeda Relationship." *Washington Post*, Jun 18, 2004. On-line. Available from <http://www.washingtonpost.com/wp-dyn/articles/A50679-2004Jun17.html>.

- Ministry of Home Affairs, India. "Prevention of Terrorism Act 2002." On-line. Available from <http://mha.nic.in/poto-02.htm>.
- Mishal, Shaul and Maoz Rosenthal. "Al Qaeda as a Dune Organization: Toward a Typology of Islamic Terrorist Organizations." *Studies in Conflict and Terrorism*, Vol. 28, 2005, 275-293.
- Mockaitis, Thomas R. "The Iraq War: Learning from the Past, Adapting to the Present and Planning for the Future." Feb 2007. Army War College, Strategic Studies Institute, Carlisle, PA.
- Montero, David. "New Strategy in Taliban's Offensive: Kidnappings are the Taliban's New Weapon of Choice in Afghanistan." *Christian Science Monitor*. Apr 11, 2007. On-line. Available from <http://www.csmonitor.com/2007/0411/p01s01-wosc.htm>.
- Mortenson, Greg and David Oliver Relin. *Three Cups of Tea: A One Man's Mission to Fight Terrorism and Build Nations... One School at a Time*. New York: Viking, 2006.
- Multi-National Force – Iraq Website - <http://www.mnf-iraq.com>.
- Murphy, Dennis. "Information Operations and Winning the Peace: Wielding the Information Element of Power in the Global War on Terrorism." CSL Issue Paper, Center for Strategic Leadership, U.S Army War College, Vol. 14-05, Dec 2005.
- Naryanan, M. K. National Security Advisor, India. Speech at the 43rd Conference on Security Policy, Munich, Feb 9-11, 09-11 Feb. 2007. On-line. Available from <http://www.securityconference.de/konferenzen/rede.php?sprache=en&id=198&>.
- Nash, Elizabeth. "Madrid Bombers were Inspired by Bin Laden Address." *The Independent*, Nov 7, 2006. On-line. Available from <http://news.independent.co.uk/europe/article1961431.ece>.
- Nasr, Vali. "Pakistan: Balancing Reform and Counterterrorism." Testimony to the Senate Foreign Relations Committee, Jul 14, 2004. On-line. Available from <http://foreign.senate.gov/testimony/2004/NasrTestimony040714.pdf>.
- Netanyahu, Benjamin. *Fighting Terrorism: How Democracies Can Defeat the International Terrorist Network*. New York: Farrar, Straus and Giroux, 1995 / 2001.
- O'Toole, Pam. "Taliban Radio Station Back on Air." BBC News, 21 Jun 2007. Online, Available from http://news.bbc.co.uk/2/hi/south_asia/6224972.stm.

- Oliker, Olga and et al. "Aid During Conflict: Interaction Between Military and Civilian Assistance Providers in Afghanistan, September 2001–June 2002." RAND Corporation. On-line. Available from http://www.rand.org/pubs/monographs/2004/RAND_MG212.pdf.
- PBS Frontline Online Video Report. "Al Qaeda's New Front." Directed by Neil Docherty, Jan 25, 2005. On-line. Available from <http://www.pbs.org/wgbh/pages/frontline/shows/front/view/>.
- Pew Global Attitude Project. "Islamic Extremism: Common Concern for Muslim and Western Publics." Jul 14, 2005. On-line. Available from <http://pewglobal.org/reports/display.php?ReportID=248>.
- PEW Polls. "Military Action A Higher Priority Than Homeland Defense." The Pew Research Center, Sep 21, 2001. On-line. Available from <http://people-press.org/reports/display.php3?ReportID=2>.
- Pillar, Paul R. *Terrorism and U.S Foreign Policy*. Washington D.C: Brookings Institution Press, 2001, 157-198.
- Pincus, Walter and Dana Milbank. "Al Qaeda-Hussein Link Is Dismissed." *Washington Post*, Jun 17, 2004. On-line. Available from <http://www.washingtonpost.com/wp-dyn/articles/A47812-2004Jun16.html>.
- Pitts, Joseph R. "Making Up For Lost Time: The Army is Stepping up to fill a Critical Gap in EW Training." Electronic Warfare Working Group, Issue Brief #22, Apr 24, 2007. On-line. Available from <http://www.house.gov/pitts/initiatives/ew/Library/Briefs/brief22.htm>.
- Pitts, Joseph R. "Making Up for Lost Time: The Army is stepping up to fill a critical gap in EW Training." Electronic Warfare Working Group, Apr 24, 2007. On-line. Available from <http://www.house.gov/pitts/initiatives/ew/Library/Briefs/brief22.htm>.
- Poole, John H. *Terrorist Trail*. Emerald Isle, NC: Posterity Press, 2006.
- Posen, Barry R. "The Struggle against Terrorism: Grand Strategy, Strategy and Tactics." *International Security*, Vol. 26, No 3, Winter 2001/2002.
- Pressman, Jeremy. "Leaderless Resistance: The Next Threat?" *Current History*, Dec. 2003, 422.
- Program on International Policy Attitudes (PIPA) Poll. "Americans on Iraq and the UN Inspections." Jan 2003. On-line. Available from <http://65.109.167.118/pipa/pdf/jan03/IraqUNInsp1%20Jan03%20rpt.pdf>.

- Program on International Policy Attitudes (PIPA) Poll. "Americans On Iraq: WMD Links To Al-Qaeda, Reconstruction." Available from <http://65.109.167.118/pipa/pdf/jul03/IraqWMD%20Jul03%20rpt.pdf>.
- Public Broadcasting Service (PBS). "Cyberwar." *Frontline*, Documentary Consortium. Program aired on Apr 24, 2003. On-line]. Available from <http://www.pbs.org/wgbh/pages/frontline/shows/cyberwar/>.
- Qutb, Sayyid. "Jihad in the Cause of God." In "The legacy of Jihad: The Islamic Holy-War and the Fate of Non-Muslims." Ed. Andrew G. Boston. New York: Prometheus Books, 2005.
- Ranstorp, Magnus. "Terrorism in the Name of Religion." In Russell D. Howard and Reid L. Sawyer, eds. *Terrorism and Counterterrorism: Understanding the New Security Environment*, revised and updated. Guilford, Connecticut: McGraw-Hill / Dushkin, 2004.
- Rashid, Ahmed. "Letter from Afghanistan: Are the Taliban Winning?" *Current History* 106, Jan 2007. On-line. Available from http://www.currenthistory.com/org_pdf_files/106/696/106_696_17.pdf.
- Rashid, Ahmed. *Taliban: Militant Islam, Oil and Fundamentalism in Central Asia*. Waterville, Maine: Thorndike Press, 2002.
- Reed, Lawrence W. "The Importance of Ideas." On-line. Available from <http://www.mackinac.org/article.aspx?ID=4054>
- Rice, Condoleezza. Transcript of the press briefing of Sep 19, 2001 in the *Washington Post*. On-line. Available from http://www.washingtonpost.com/wp-srv/nation/specials/attacked/transcripts/ricetext_091901.html.
- Richardson, Louise, ed. *The Roots of Terrorism*. New York: Routledge, 2006.
- Riedel, Bruce. "Al Qaeda Strikes Back." *Foreign Affairs*. May/Jun 2007, Vol. 86, Issue 3, 24-70.
- Rodham, Peter W. "Post Conflict Afghanistan." Testimony to the Senate Committee on Foreign Relations, Feb 12, 2003. On-line. Available from <http://www.senate.gov/~foreign/testimony/2003/RodmanTestimony030212.pdf>.
- Rollins, John and Clay Wilson. "Computer Attack and Cyberterrorism: Vulnerabilities and Policy Issues for Congress." *CRS Report for Congress*, Report No. RL 32114, Oct 20, 2005. On-line. Available from <http://fpc.state.gov/documents/organization/45184.pdf>.

- Ronfeldt, David and John Arquilla. "What Next for Networks and Netwars." In *Networks and Netwars: The Future of Terror, Crime and Militancy*. John Arquilla and David Ronfeldt, eds. Santa Monica: RAND, 2001. On-line. Available from http://www.rand.org/pubs/monograph_reports/MR1382/.
- Ronfeldt, David. "Al Qaeda and Its Affiliates: A Global Tribe Waging Segmental Warfare?" *First Monday*, Vol. 10, No. 3, 7 Mar 2005. Journal on-line. Available from http://www.firstmonday.org/issues/issue10_3/ronfeldt/index.html.
- Ronfeldt, David. "In Search of How Societies Work: Tribes — The First and Forever Form." RAND working paper, Dec 2006. On-line. Available from http://www.rand.org/pubs/working_papers/2007/RAND_WR433.pdf.
- Rosen, Nir. "Occupation of Iraqi Hearts and Minds." Jun 27, 2006. On-line. Available from http://www.truthdig.com/dig/item/20060627_occupation_iraq_hearts_minds.
- Rosenau, William. "Waging the "War of Ideas." RAND Corporation, 2006.
- Rothstein, Hy. *Afghanistan and the Trouble Future of Unconventional Warfare*. Annapolis, Maryland: Naval Institute Press, 2006.
- Rubin, Barnett R. "Still Ours to Lose: Afghanistan on the Brink." Testimony to the Senate Foreign relations Committee, Sep 21, 2006. On-line. Available from <http://www.senate.gov/~foreign/testimony/2006/RubinTestimony060921.pdf>.
- Rumsfeld, Donald. "Briefing on Operation Enduring Freedom." *Global Security*. Oct 7, 2001. [On-line], transcript Available from <http://www.globalsecurity.org/military/library/news/2001/10/mil-011007-usia04.htm>.
- Rumsfeld, Donald. "Testimony to Senate Armed Forces Committee," Jul 09, 2003. On-line. Available from <http://armed-services.senate.gov/statemnt/2003/July/Rumsfeld.pdf>.
- Sageman, Marc. "Understanding Terror Networks." Nov 1, 2004. On-line. Available from <http://www.fpri.org/enotes/20041101.middleeast.sageman.understandingterrornetworks.html>.
- Satloff, Robert. *The Battle of Ideas in the War on Terror*. The Washington Institute for Near East Policy, 2004.

- Sawt al Khilafa, Third Edition of Voice of the Caliphate. On-line. Available from http://www.clandestineradio.com/audio/meast_aq_caliphate_051010.wmv.
- Saxton, Jim. "Al Qaeda's Weapon of Mass Influence." *Washington Times*, Feb 26, 2007.
- Scheuer, Michael. "Al-Qaeda's New Leader in Afghanistan: A Profile of Abu al-Yazid." *Terrorism Focus*. Vol 4, Issue 21, Jul 3, 2007. On-line. Available from <http://jamestown.org/terrorism/news/article.php?articleid=2373518>.
- Schlesinger, Philip. "Terrorism, the Media and the Liberal Democratic State: A Critique of Orthodoxy." *Social Research*, Vol. 48, 1981, 74-99.
- Schmid, Alex P and Albert J. Jongman. *Political Terrorism*. New Brunswick: Transaction, 2005.
- Schroen, Gary C. *First In*. New York: Ballantine Books, 2005.
- Search for International Terrorist Entities (SITE) Institute. "First Issue of the Technical Mujahid, a New Periodic Magazine Related to Technology and Internet Security Published by al-Fajr Information Center." Nov 28, 2006. On-line. Available from <http://www.siteinstitute.org/bin/articles.cgi?ID=publications229606&Category=publications&Subcategory=0>.
- Shafran, Stacie. "Joint Intelligence Operations Center Opens in Kabul." Jan 29, 2007. On-line. Available from <http://www.af.mil/news/story.asp?id=123039140>.
- Shah, Taimoor and Carlotta Gall. "Top Taliban Commander Is Killed in Clash." *New York Times*, May 13, 2007. Online, Available from <http://www.nytimes.com/2007/05/13/world/asia/13cnd-afghan.html?ex=1184040000&en=a34b02fdf4dda136&ei=5070>.
- Shultz, Jr, Richard H. and Ruth Margolies Beitler. "Tactical Deception and Strategic Surprise in Al Qaida's Operations." *Middle East Review of International Affairs (MEIRA)*, Vol. 8, No. 2, Jun 2004.
- Singh, Manmohan. Prime Minister of India. Address to the UN General Assembly, New York, Sep 23, 2004. On-line. Available from [http://disarmament.un.org/library.nsf/ee2e1d19ed299db885256e400059830b/4363f3c8fa13437c85256f3b0059fb0b/\\$FILE/gapv59.7.pdf](http://disarmament.un.org/library.nsf/ee2e1d19ed299db885256e400059830b/4363f3c8fa13437c85256f3b0059fb0b/$FILE/gapv59.7.pdf).
- Slim, Bouchaib. "Al Qaeda wants its own TV." Institute of Defense and Strategic Studies, Singapore, Oct 24, 2005. On-line. Available from <http://www.idss.edu.sg/publications/Perspective/IDSS732005.pdf>.

- Slim, Bouchaib. "The Internet and Al Qaeda – How bin Laden uses Technology for his Cause." Institute of Defense and Strategic Studies, Singapore, Sep 8, 2005. On-line. Available from <http://www.idss.edu.sg/publications/Perspective/IDSS622005.pdf>.
- Sloggett, David. "Intelligence Support to Contemporary Information Operations." *IO Sphere*. The Professional Journal of Joint Information Operations, Joint Information Operations Warfare Command, Spring 2007.
- Smith, Charles R. "Cyber War Against Iraq: U.S. Information Warriors Wrestle With New Weapons." *Newsmax Online*, Mar 13, 2003. On-line. Available from <http://www.newsmax.com/archives/articles/2003/3/12/134712.shtml>.
- Smith, Johnathan B. "The Madrid Train Bombing and the Emergence of Al Qaeda 2.0: A Case of Politics, Force Multiplier Effects and Engaging the Far Enemy." Michigan State University, Feb. 25, 2005.
- Smith, Martin. "Return of the Taliban." Frontline PBS video, Oct 03, 2006. On-line. Available from <http://www.pbs.org/wgbh/pages/frontline/taliban/>.
- Spencer, Robert. "The New Face of Al Qaeda." *FrontPageMagazine*, Jun 1, 2004. On-line. Available from <http://www.frontpagemag.com/Articles/ReadArticle.asp?ID=13591>.
- Stapleton, Barbara J. "A British Agencies Afghanistan group Briefing Paper on Development of Joint Regional Teams in Afghanistan." Jan 2003. On-line. Available from http://www.baag.uk.org/downloads/reports/barbara_JRT_report.pdf.
- Starr, Barbara "U.S. e-mail Attack Targets Key Iraqis." *CNN Online*, Jan 12, 2003. On-line. Available from <http://www.cnn.com/2003/WORLD/meast/01/11/sproject.irq.email/index.html>.
- Stratfor Crisis Cente., "As-Sahab: Al Qaeda's Nebulous Media Branch." *Stratfor*, Sep 8, 2006. On-line. Available from <https://www.stratfor.com/offers/alerts/index.php?ref=FOX&camp=stratforalert&>.
- Synovitz, Ron. "Afghanistan: Pakistan Hails Capture of Taliban Spokesman as Breakthrough." *Radio Free Europe Radio Liberty*. Online, Available from <http://www.rferl.org/featuresarticle/2005/10/d9118b1c-d410-4554-886a-59b93c5952a4.html>.
- Tarzi, Amin. "Afghanistan: Neo-Taliban Free To Communicate With Media." *Radio Free Europe Radio Liberty*. Online, Available from <http://www.rferl.org/featuresarticle/2005/8/7FCBD083-8E0D-4003-8D4C-603D0110AAF2.html>.

- Taylor, Phil. Website at the Institute of Communication Studies. "DOD Awards \$300M in PSYOPs Contracts." Jun 7, 2005. On-line. Available from <http://ics.leeds.ac.uk/papers/vp01.cfm?outfit=pmt&folder=16&paper=2397>.
- Taylor, Philip M. "PSYOPS in Iraqi Freedom." On-line. Available from <http://ics.leeds.ac.uk/papers/vp01.cfm?outfit=pmt&requesttimeout=500&folder=16&paper=20>.
- Terror Free Tomorrow. "New Polls throughout Muslim World: Humanitarian Leadership by US Remains Positive." On-line. Available from <http://www.terrorfreetomorrow.org/upimagestft/Irans%20Neighbors%20Poll%20Report.pdf>.
- Thomas, Timothy L. "Al Qaeda and the Internet: The Danger of "Cyberplanning". " *Parameters*, United States Army War College, Spring 2003, 112-123.
- TIME/CNN Poll. "Americans Give Bush a Big Thumbs-Up." Sep 28, 2001. On-line. Available from <http://www.time.com/time/nation/article/0,8599,176815,00.html>.
- Tumber, Howard and Jerry Palmer. *Media at War: The Iraq Crisis* (London: Sage Publications, 2004).
- Tyson, Ann Scott. "Rumsfeld Urges Using Media to Fight Terror." *The Washington Post*. Feb. 18, 2006, A07. On-line. Available from <http://www.washingtonpost.com/wp-dyn/content/article/2006/02/17/AR2006021701980.html>.
- Ulph, Stephen. "Al-Zawahiri Encourages Targeting of Gulf Oil..." *Terrorism Focus*, The Jameston Foundation, Vol. II, Issue 23, Dec 13, 2005. On-line. Available from http://jamestown.org/terrorism/news/uploads/tf_002_023.pdf.
- United Kingdom Ministry of Defense. "Operations in Iraq: First Reflections." Jul 2003. On-line. Available from http://www.mod.uk/NR/rdonlyres/0A6289F6-898B-44C5-9C9D-B8040274DC25/0/opsiniraq_first_reflections_dec03.pdf.
- United Kingdom, Ministry of Defense. "The Defense Communications Strategy." On-line. Available from http://www.mod.uk/NR/rdonlyres/3D4C12DC-6A9D-4B3A-87C9-FBC903D9623C/0/def_comms_strat.pdf.
- United Nations General Assembly, 60th Session. "Global Counter-Terrorism Strategy." Sep 8, 2006. On-line. Available from <http://www.un.org/terrorism/strategy-counter-terrorism.html>.

- United Nations. "A More Secure World: Our Shared Responsibility." Report of High Level Panel on Threats Challenges and Change. United Nations General Assembly, Dec 1, 2004. On-line. Available from <http://www.un.org/secureworld/>
- United Nations. "UN Actions to Counter Terrorism." On-line. Available from <http://www.un.org/terrorism/>.
- United States Air Force. *Operation Anaconda: An Air Power Perspective*. Feb 7, 2005. On-line. Available from http://www.milintelligence.com/Operation_Anaconda_AF_report.pdf.
- United States Army Website. On-line. Available from <http://www.army.mil/cmhp-g/lineage/branches/civaf/>.
- United States General Accounting Office. "Electronic Warfare: Comprehensive Strategy Still Needed for Suppressing Enemy Air Defenses." GAO-03-51, Nov 2002.
- United States of America. *Antiterrorism*. Joint Publication, JP 3-07.2, Mar 17, 1998.
- United States of America. "9/11 Five Years Later: Successes and Challenges." Washington D.C. Sep 2006. On-line. Available from <http://www.whitehouse.gov/nsc/waronterror/2006/waronterror0906.pdf>.
- United States of America. "The 9/11 Commission Report: The Final Report of the Commission on Terrorists Attacks Upon the United States." On-line. Available from <http://www.9-11commission.gov/report/index.htm>.
- United States of America. "The National Security Strategy of the United States of America." Mar 2006.
- United States of America. *9/11 Five Years Later: Success and Challenges*. Sep 2006. On-line. Available from <http://www.state.gov/documents/organization/72027.pdf>.
- United States of America. *Country Reports on Terrorism 2005*. Chapter 5: South Asia Overview. On-line. Available from <http://www.state.gov/documents/organization/65475.pdf>.
- United States of America. *Country Reports on Terrorism*. 30 Apr 2007. On-line. Available from <http://www.state.gov/s/ct/rls/crt/2006/>.
- United States of America. *Information Operations*. Joint Publication 3-13, Feb 13, 2006.

United States Strategic Command. "STRATCOM Briefing to CG, Multi National Forces – Iraq." Jul 4, 2004. Available at Information Operations Center at Naval Postgraduate School, Monterey, CA.

Verton, Dan. *Black Ice: The Invisible Threat of Cyber Terror*. Emeryville, CA: McGraw-Hill, 2003.

Walker, Karen. "Anaconda's Lesson: People, Not ISR Gizmos, Win Battles." On-line. Available from <http://www.dnmediagroup.com/promos/conferences/0505coverage/856509.html>.

Walsh, Declan. "Afghans Admit doing Deal with Taliban to Free Italian Hostage.", *The Guardian*. Mar 21, 2007. On-line. Available from <http://www.guardian.co.uk/afghanistan/story/0,,2038813,00.html>.

Website – www.icasualties.org. On-line. Available from <http://icasualties.org/oef>.

Weimann, Gabriel. "Cyberterrorism: The Sum of All Fears." *United States Institute of Peace*, May 2004.

White, Johnathan R. *Terrorism: An Introduction*, 3rd ed. Stamford, Connecticut: Wadsworth Thomas Learning, 2001.

White, Josh and Sonya Geis. "4 Marines Charged in Haditha Killings." *Washington Post*, Dec 22, 2006. On-line. Available from <http://www.washingtonpost.com/wp-dyn/content/article/2006/12/21/AR2006122100124.html>.

Wikipedia Website – <http://en.wikipedia.org/>

Wikiquote Website. "Sun Tzu Quotes." On-line. Available from http://en.wikiquote.org/wiki/Sun_Tzu.

Williams, Brian Glyn and Cathy Young. "Cheney Attack Reveals Taliban Suicide Bombing Patterns." *Terrorism Monitor*. Vol 5, Issue 4, Mar 1, 2007. On-line. Available from <http://www.jamestown.org/terrorism/news/article.php?articleid=2370264>.

Wither, James. "A Work in Progress: The United Kingdom's Campaign Against Radicalization." *George C. Marshall – European Center for Security Studies*, Occasional Paper Series, No. 9, Feb 2007.

Woods, Kevin James Lacey, and Williamson Murray. "Saddam's Delusions: The View From the Inside." *Foreign Affairs*, May/June 2006.

Woolley, Wayne. "Civil Affairs Unit Mans the Army's Diplomatic Front." *The Star Ledger*, Mar 07, 2005. On-line. Available from http://www.nj.com/war/ledger/index.ssf?/news/ledger/stories/0307_woolley.html.

World Public Opinion Website. "Iranians Overwhelmingly Reject Bin Laden," and Jan 30, 2007. On-line. Available from <http://www.worldpublicopinion.org/pipa/articles/brmiddleeastnafricara/313.php?nid=&id=&pnt=313&lb=btis>.

World Public Opinion Website. "Large and Growing Numbers of Muslims Reject Terrorism, Bin Laden." Jun 30, 2006. On-line. Available from http://www.worldpublicopinion.org/pipa/articles/international_security_bt/221.php?nid=&id=&pnt=221.

Yusufzai, Rahimullah. "Out-of-Power Taliban Resumes Public Execution." ABC News Online, May 15, 2006. Online, Available from <http://abcnews.go.com/International/story?id=1963240>.

Zaidan, Ahmed. "Interview with Mullah Dadullah." Al Jazeera, Apr 2007. On-line. Available from <http://english.aljazeera.net/NR/exeres/BDC2540E-67F8-4019-9AD5-698720FE16CE.htm?FRAMELESS=true&NRNODEGUID=%7bBDC2540E-67F8-4019-9AD5-698720FE16CE%7d>.

Zawahiri, Ayman Al. "Letter from al-Zawahiri to al-Zarqawi." Jul 9, 2005. On-line. Available from http://www.fas.org/irp/news/2005/10/letter_in_english.pdf.

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